Materi 5
Kendali dan Transmisi data pada drone

MOOC UNAIR

Merakit dan Mengaplikasikan Robot Terbang/ Drone untuk Pemula dengan Menggunakan Platform Open Source

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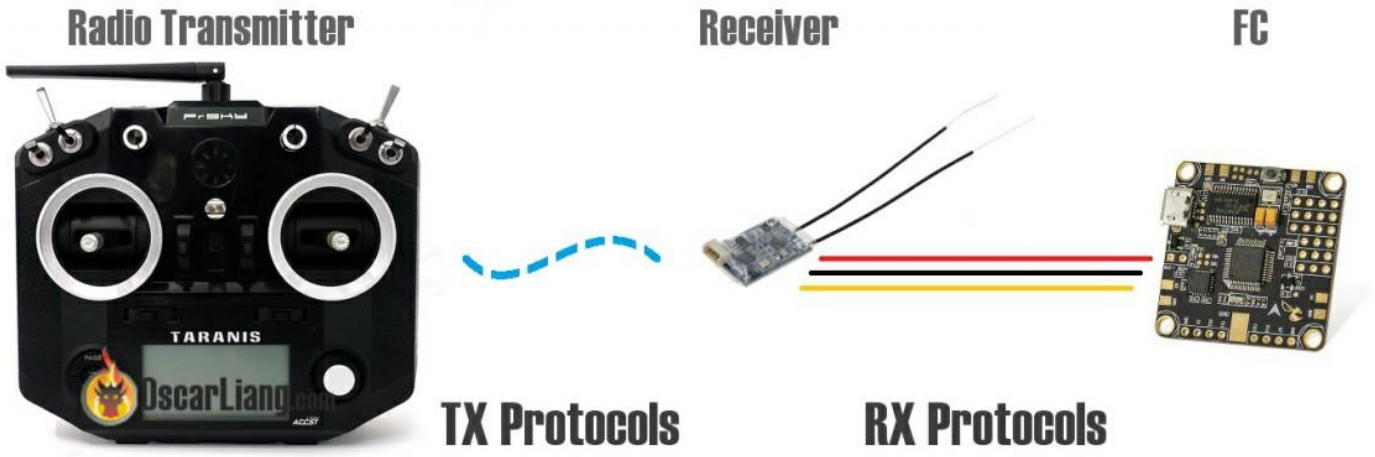
UNIVERSITAS AIRLANGGA
Excellence with morality

RC Tranmitter, Basic teleoperated Controller



- 2.4 GHZ Frequency - Hopping
- Customized Channel & Program
- Audio Speech Outputs (values, alarms, settings, etc.)
- Real-time Flight Data Logging
- Receiver Signal Strength Indicator (RSSI) Alerts
- Super Low Latency
- Vibration Alerts
- Open source firmware OpenTx installed.

Some standard protocols for receiver :

PWM - This is your classic analogue signal with one separate wire for each channel. This is now slow and outraged and should be avoided if possible

PPM - This is a slightly improved version of PWM where all the channels are sent over one wire as a series of timed pulses. This is quicker than PWM however is still not the best option.

Digital Protocols (SBUS, IBUS, DSM2/X) - Instead of relying on the timings of different pulse widths digital signals send numbers in ones and zeros which gives perfect accuracy along with even quicker response times.

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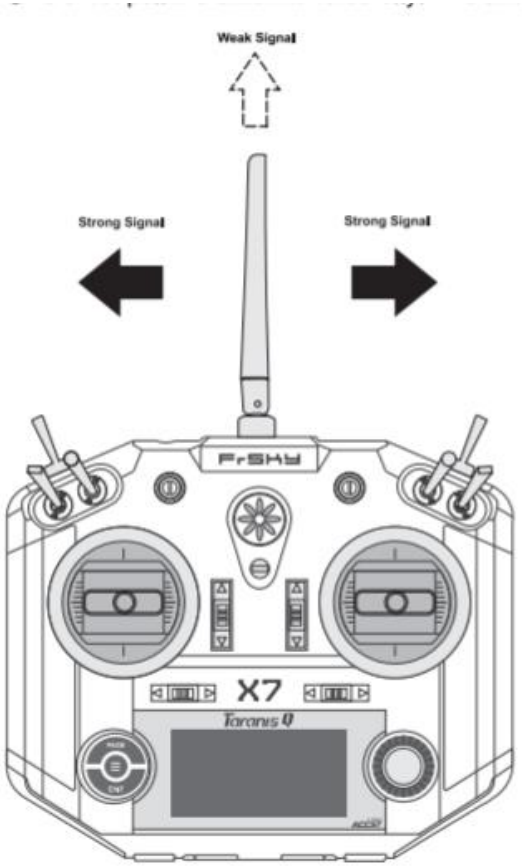
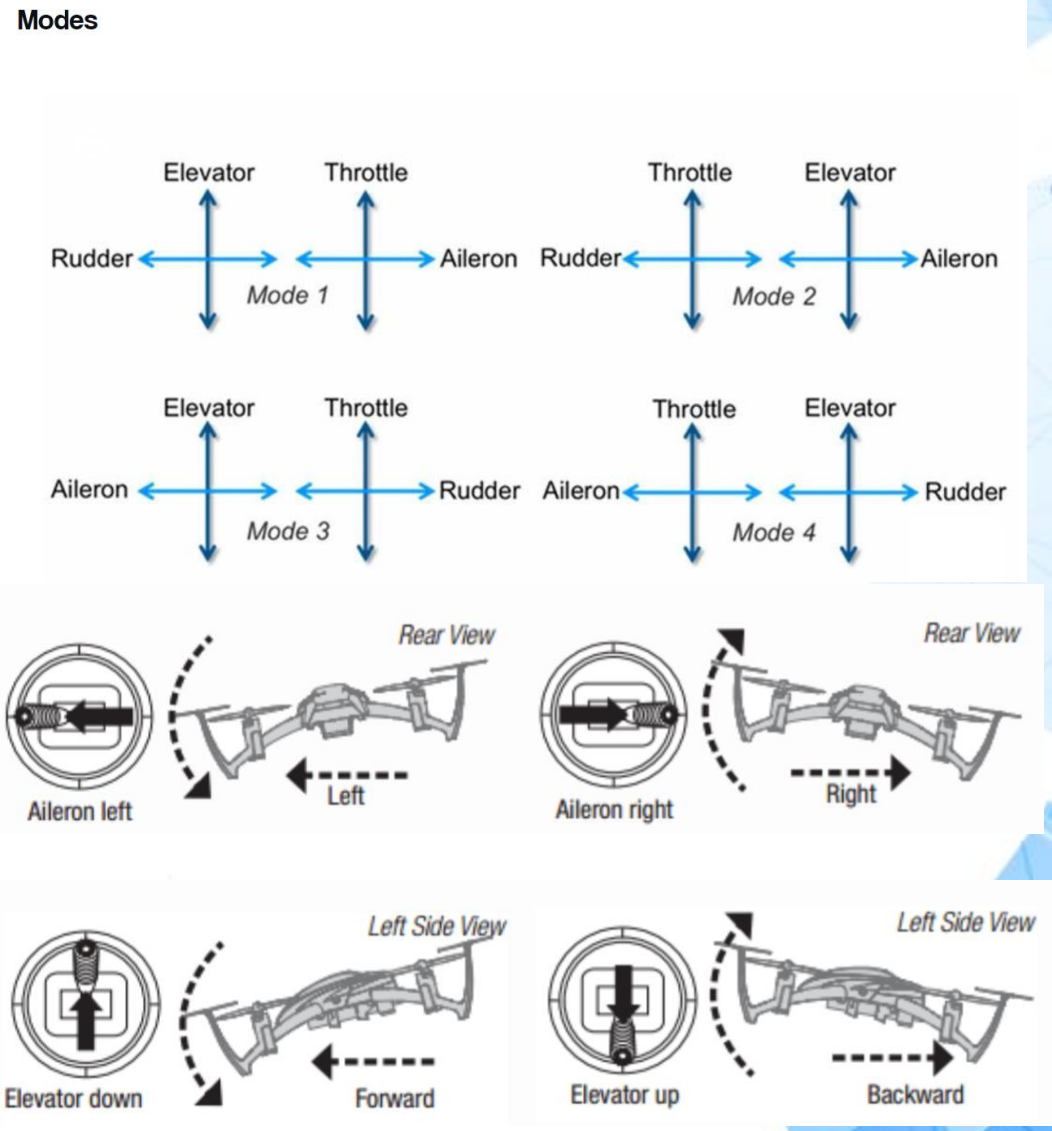
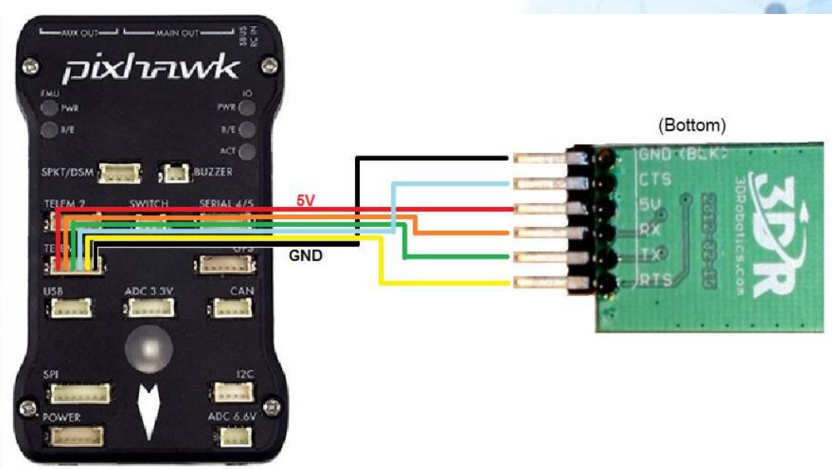




Telemetry Sistem

Version 2

Version 1



Connecting to APM 2.5

Data Navigasi dari Telemetry