

<OSD-APM Manual>

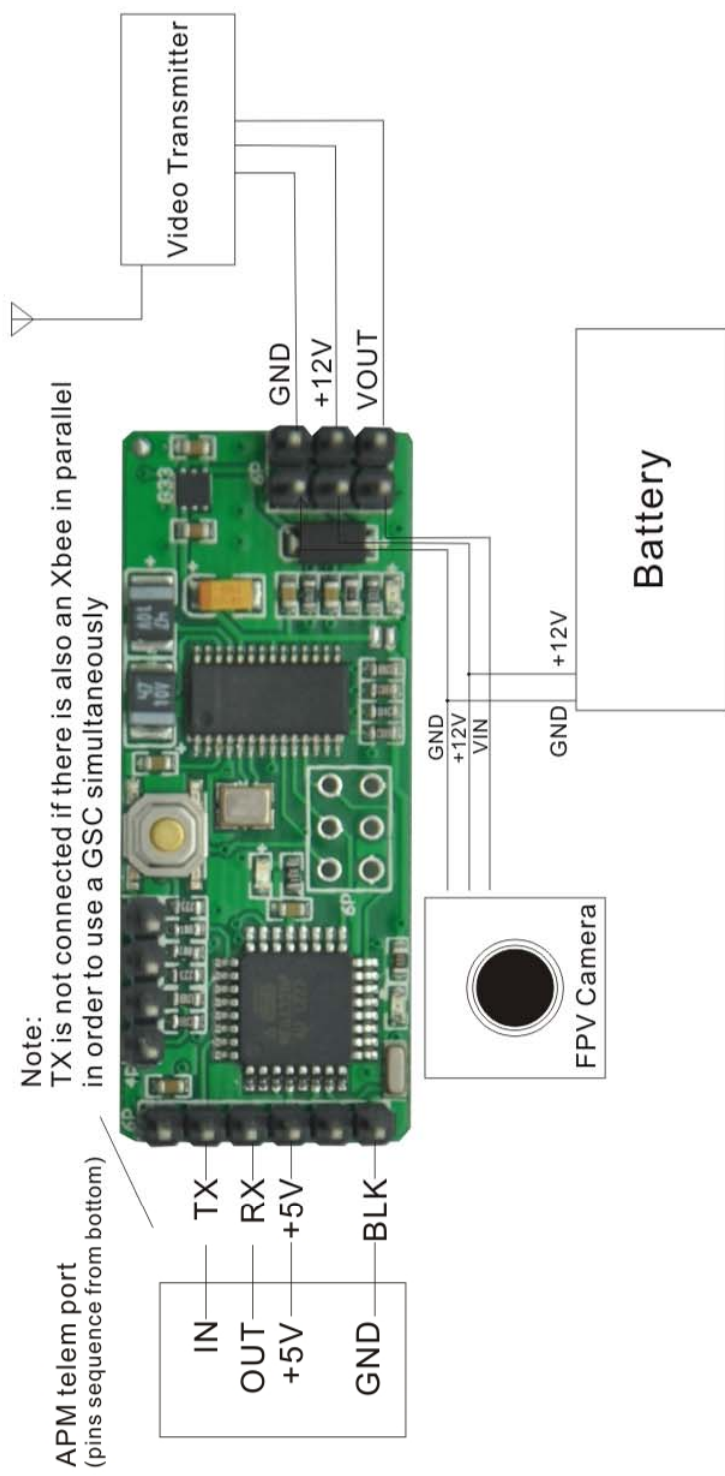
This unit is intended to be the dedicated APM telemetry video output. It'll read the MAVLink message from the receiver and request the rates from the APM if you connect the TX to ArduPilot's telemetry port.

Please note: The OSD cannot be connected to the APM 2 when it's connected via USB (both units share the same port). Make sure you disconnect the USB cable from the APM 2 board before you use the OSD.

Details

OSD unit is equipped with a Max7456 chip and is powered by 2 stages to avoid noise from any servos attached to the ArduPilot Mega board. It provides a clean power line to feed the FPV camera and video link.

The use of two external power sources:
12V from a Lipo Battery and 5V from the APM.



Raw 12V from Lipo Battery:

Provides feed directly to the FPV camera and video transmitter.

Feeds the Max7456's analog line(AVDD and AGND) with a 5V voltage regulator (to avoid the noise from servos attached to the APM).

5V from APM telemetry port:

Feeds the ATmega328P and Max7456 digital line (DVDD and DGND).