

Wiring Diagram for ArduPilot Mega 2.5 Flight Controller with GPS

<https://diydrones.com/profiles/blogs/apm-2-5-from-hobbyking>



Assumption: The on-hand GPS board is similar to a NEO-6M GPS Module.

<https://hobbyking.com/en-us/neo-6m-gps-module.html>

Battery power can be applied to the board via either the Input or the Output middle +5V pins and the outside GND pins. <https://ardupilot.org/copter/docs/common-powering-the-apm2.html#common-powering-the-apm2>

The onboard button battery is for backup only.

The microUSB port (not installed on the NEO-6M) can be used as both a power and data port.

ArduPilot APM2.x Wiring Diagram

<https://ardupilot.org/copter/docs/common-apm25-and-26-overview.html>

<https://ardupilot.org/plane/docs/archived-apm2x-wiring-quickstart.html>

DMK Interpretations (07-10-2024)

APM2.x Pin 1 = Rudder (Note: On diagram, Rudder is Pin #4)

APM2.x Pin 3 = Sail Winch

RX Aux 1 Controls Video Power On & Off

RX Aux 3 Switches between Manual Joystick Control and APM Flight Controller

INPUTS (From FlySky Receiver)

Pin 1 = Rudder

Pin 3 = Sail Winch

OUTPUTS (To Rudder & Sail Winch Servos)

Pin 1 = Rudder Servo

Pin 3 = Sail Winch Servo

Electrical Power Notes

<https://ardupilot.org/plane/docs/archived-apm2x-wiring-quickstart.html>

For APM2.0 you will need a power source.

For electric aircraft, this is usually the ESC.

For gas/nitro powered planes, your radio will need its own battery/BEC.

ArduPilot Mega normally gets its power from the RC system.

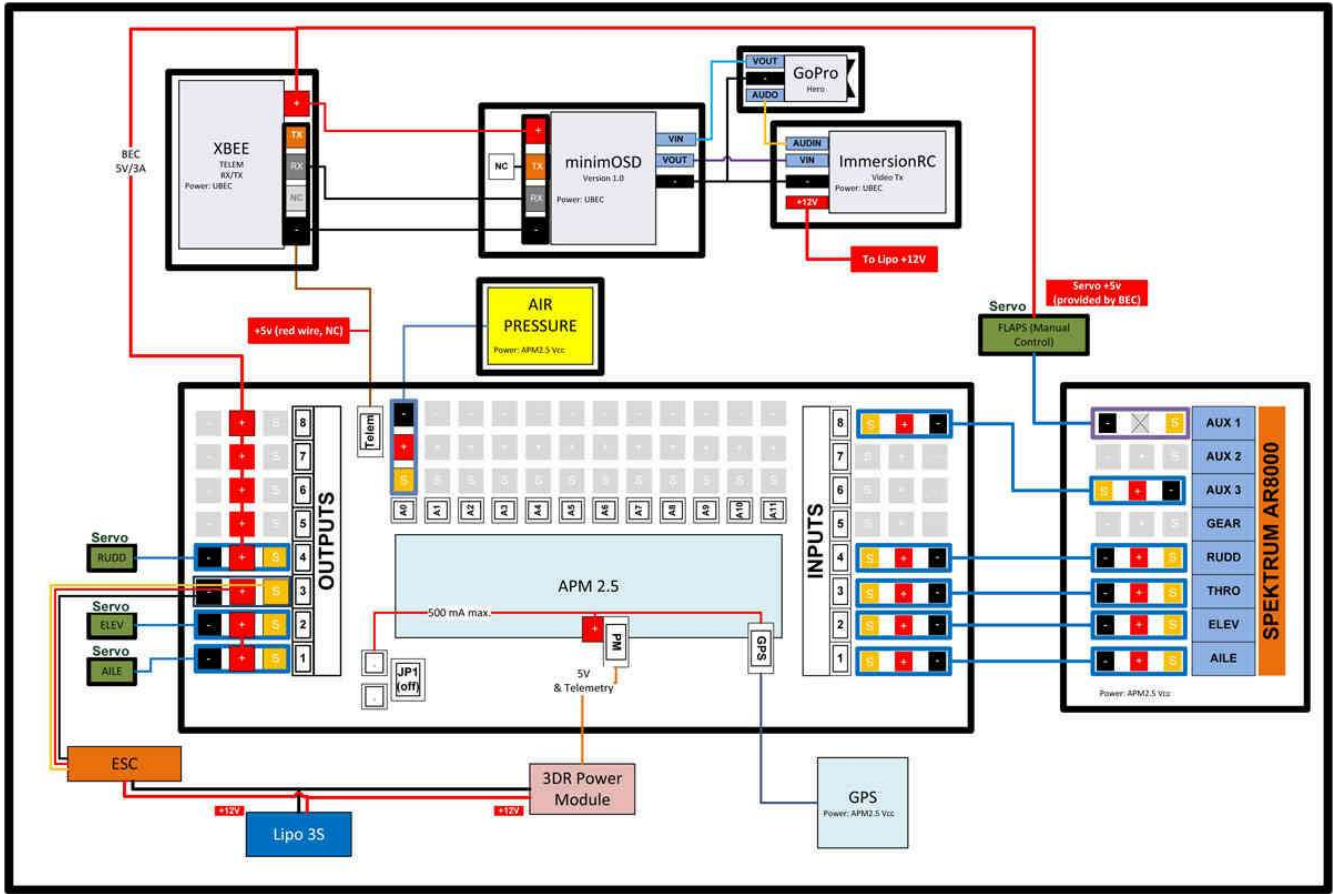
For APM2.5 you can use the supplied APM Power Module for the power

Warning:

You still need an ESC or BEC to power the servos.

Note:

Can also power APM 2 from the USB cable. However, this will not power the RC output pins, so if you want to see servos move while testing APM 2 on the bench, you'll need to connect a battery (through an ESC) to one of the output channels. It's fine to have both an ESC and the USB cable connected at the same time.



New wireless telemetry port

More robust USB port connector

Extra status LED

Measure Vcc here

New diode

New fuse

Power port

New External I2C port

Optional to use external magnetometer

On board Mag

Dataflash

Old style GPS port

New style GPS port

