

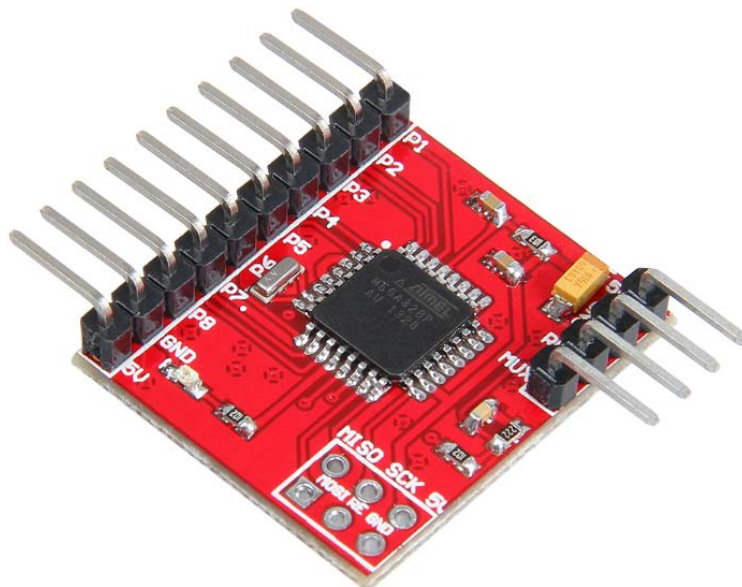
PPM encoder Users Manual

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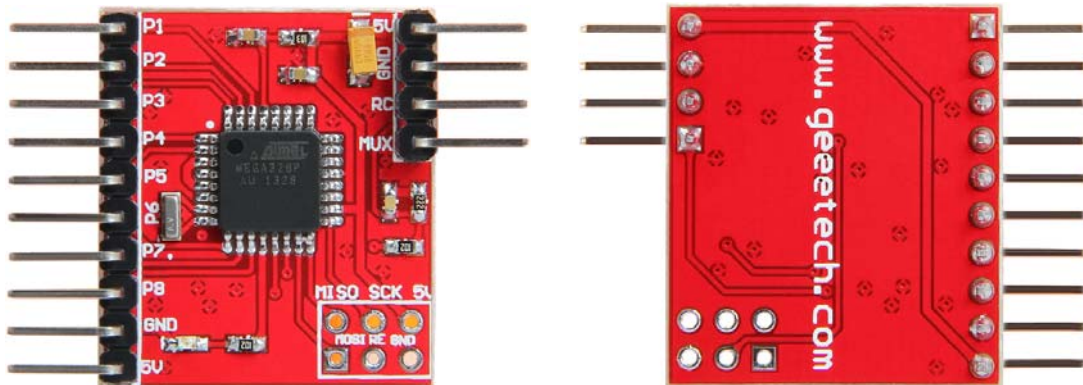
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1 Introduction

PPM encoder module is used to translates up to eight PWM (pulse width modulation) signals into one PPM (pulse position modulation) signal with ATMEGA328 IC, allowing you to connect a PWM receiver to a PPM-compatible autopilot with one wire, which on the one hand reduce the interface of the main chip and on the other hand save the space on PIXHAWK. As a result, you'll get faster processing and reduced points of error.

1.1 Overview and Hardware Resources



FRONT

BACK

1-1

Dimension : 35mm*25mm*6mm

Net weight: 2.6g

1.2 Software Resources

Firmware loading : MissionPlanner

Host software : MissionPlanner

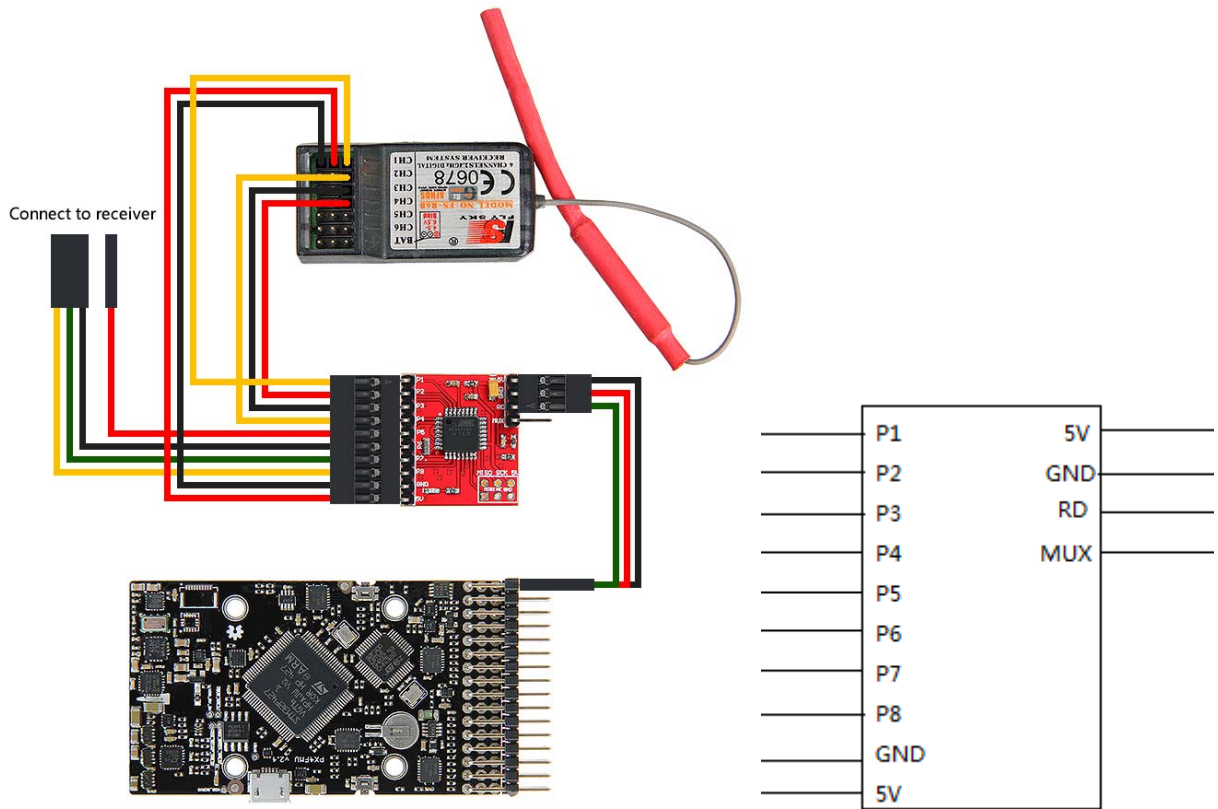
1.3 Source

Mission Planner:

<http://www.geeetech.com/wiki/images/8/85/MissionPlanner-1.2.59.rar>

2 Interfaces

2.1 Interface Layout



PPM encoder
2-1

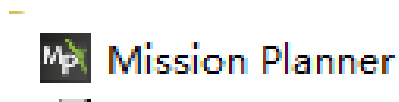
2.2 Interface specifications

1. PPM encoder combines up to 8 channels from a regular RC receiver to a single PPM input through ATMEGA328 processor for your flight controller (like Pixhawk) or electronics project.
2. When power on the PPM encoder, if the LED fast blink, there is no signal input, if the LED slow blink, there is signal input.

3 Software Setting

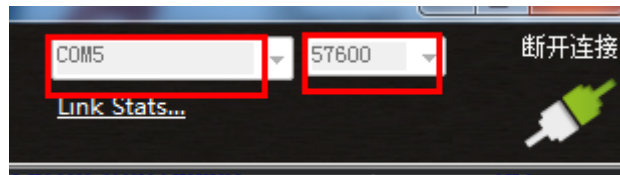
3.1 RC calibration

1. Open Mission Planner



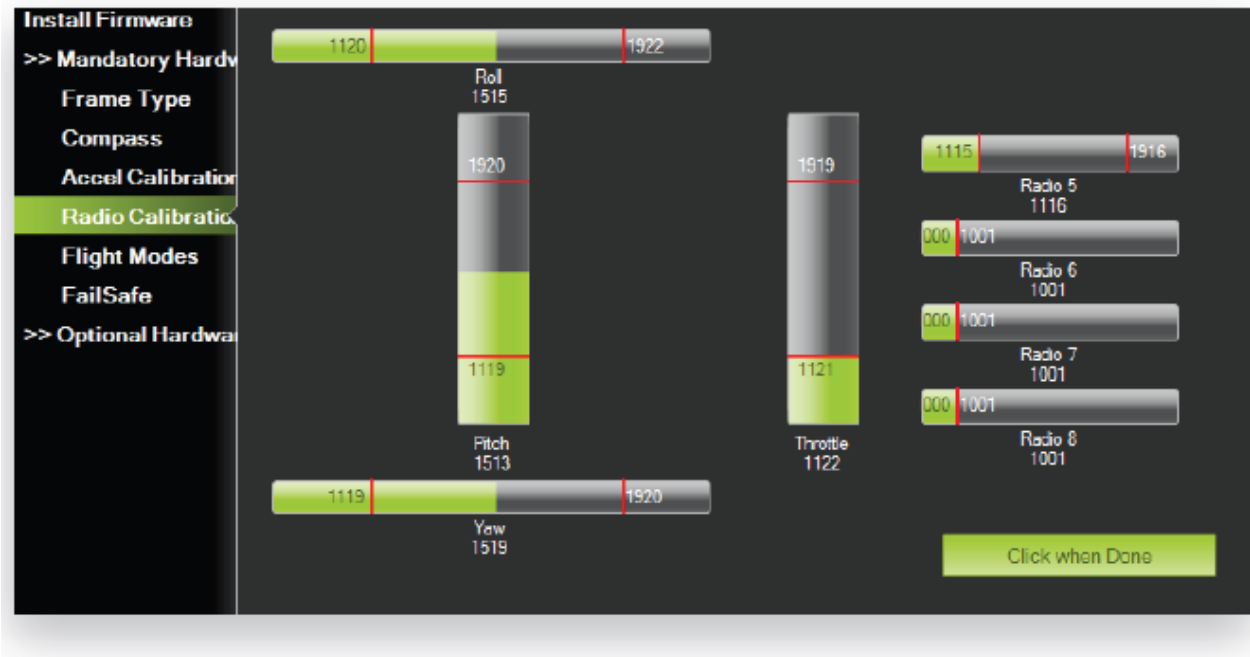
3-1

2. Choose the correct COM port and baud rate, then click connection icon.



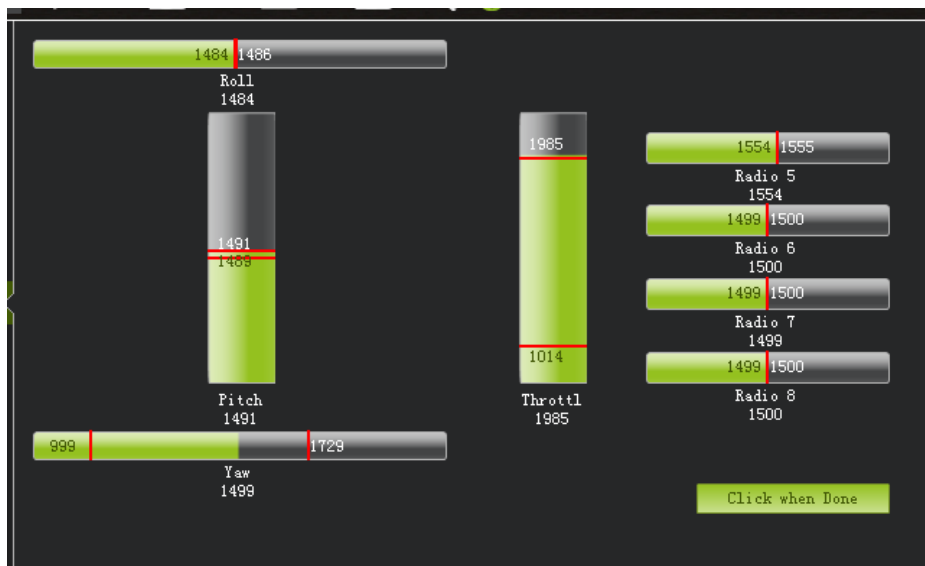
3-2

3. Calibrate RC according to the following steps.



3-3

4. Turn on your transmitter, select Calibrate Radio, and move all sticks and switches to their extreme positions. Select Click when Done once the red bars are set for all available channels. If all these are successful, that means the PPM encoder can work well.



3-4

Software set successes.