

## Installation the 2.4GHz DIY transmitting module

1. Open the transmitter, find out the Battery power supply line, PPM signal line, and the GND. You can find out Battery power supply line just behind the power switch use a voltage meter and find out the PPM signal with an oscillograph.
2. Take the order, solder the PPM signal line, Battery power supply line, GND to the DIY transmitting module(left up corner of the Figure1 )



Figure 1

3. Drill four holes on the transmitter as the paper marker guided, two holes on diagonal is designed for screw installation, the other two for dual color LED and the button. Put the paper marker on the outside of transmitter where the internal space is free to fix the extend board(Figure2) and Drill the four holes.



Figure 2

4. Solder the 4 color lines between transmitting board and the extend board take the order guided by the screen painting.
5. Solder the antenna connector at the port ANT on transmitting board.
6. Drill a hole for antenna connector at the space free on the transmitter. The diameter is 7mm is suitable. Fix the antenna connector like Figure 3.



Figure 3

7. Fix the transmitter antenna on the connector .Turn the transmitter power on and check the power indicator LED of DIY extend board, the LED is normally light red.

## Transmitting and receiving communication setup

### Installation of receivers

As the wave length of 2.4GHz is shorter, its ability to go around obstacles is weaker than receivers whose frequency is below the 100MHz .Therefore, when you install the antenna, you must avoid objects with high conductivity such as; metal parts, servos, ESC' s, battery, wires, and carbon fiber structures. If possible put the end of the antenna outside of the fuselage.

### Receiver and Transmitter Setup Instructions

By following these steps you will ensure your transmitter and receiver are properly setup and ready to fly.

1. Turn the transmitter on and adjust your transmitter to PPM mode and then turn the

transmitter off.

2. Press and hold the programming button on the transmitting module, turn the transmitter on, then you can release the button. (Attention: Not keep hold the button down over 3 seconds, or its ID will change randomly) The LED on Module will flash between red and green indicating the transmitter is ready to bind with the receiver.
3. Press and hold the button on the receiver and power the receiver on. The LED on the receiver will flash two times, indicating the receiver have recognized the transmitter. Turn off the transmitter and receiver.
4. Power on the receiver(s) without pressing any button, then power up the transmitter also without pressing button, the LED on the transmitter light yellow. The RF-link will normally connect in 15~20 seconds between transmitter and the receiver(s). If linked the LED on the receiver(s) will light red without any flash indicating the receiver(s) is operating properly. If the LED flashes sometime or does not light at all. Repeat this step until link is connected properly.

After set up receiver and transmitter, user only take the 4th step in normal flying.

We hope you enjoy your new 2.4 Ghz receiver and transmitter modules. They have been designed and produced using the highest quality control measures available. If you have any questions please do not hesitate to contact us or visit our website.

### **Range checking**

This is necessary for safe operation and must be incorporated into your setup and pre-flight operations.

### **Failsafe setting for receiver**

When RF linked between transmitter and receiver(LED on receiver light on, and all servos under controll)