Q-BOT Micro Quadcopter Flight Control

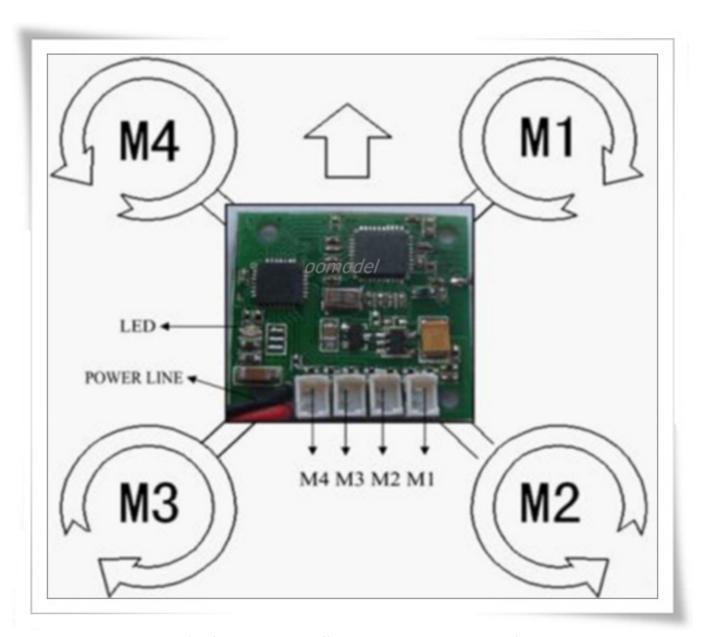
Specification:

Remote control distance: more than 80 m

Drive motor current: 1500 mA Low-voltage protection: 3.0V

Fail-Safe: after 2 seconds closing motor output

Outline dimension: 25 * 26 mm Mounting hole size: 20 * 20 mm



The power cables (line) on this, is on a different place, but the motor config. is the same

Q-BOT Micro Quad copter Flight Control Features:

A. The receiver

At the back of the transmitter (module) it is two led's, between the two led's there is a little push button. Push this so the led on the left side is red. This was the only mode the Q-BOT would work on my TX (Spektrum DX6i)(Now also tested on JR X9503) I don't know if this is only on my radios BUT all channels are set to reverse...

My radios is Mode 2 (the throttle on the left side)

B. Bind

The Q-BOT must be bound to the transmitter (module) before it will operate for the first time. The detailed operation is as followed:

Do <u>NOT</u> turn on the transmitter (module) at first, but power on the Q-BOT (put in the battery). The LED will now start to blink fast, the Q-BOT will now be in <u>frequency</u> mode; then turn on the transmitter. When the Q-BOT's LED flash slowly it means it has received signal, do not move the Q-BOT until the LED stays on, it can fly directly after LED is lit. It is unnecessary to bind with transmitter at the next flight, but turn the transmitter (module) on first, and then power on the Q-BOT.

C. Q-BOT power-up initialization

Q-BOT will be initialized when it connects to power. Once it connects to power, LED will flash, and then Q-BOT will wait for transmitter signal. Make sure you have turned the transmitter (module) ON, and the throttle joystick is in the bottom. The LED is not lit during waiting for the transmitter signal. If no signal is received within the specified time, then reenter the <u>frequency</u> mode. Receiving the transmitter signal, it will go into the gyroscope self-test status, at this time the LED will flash slowly (about every two sec). Keep the Q-BOT on a flat surface no vibration; do NOT hold it in your hand. When Gyro self-test is completed and LED stays on means it can fly.

D. Low-voltage protection

When the battery voltage is lower than 3.0V, the Q-BOT will go into the low voltage protection mode. Then LED will flash, while slowly reducing the speed of the motor until the motor stops.

E. Fail-safe

Motor will stop after 2 seconds when the flight control cannot receive the right signal.

F. Flight control parameter adjustment

The flight control can set up flight control sensitivity by the remote control sensitivity channel (GYRO ch. in heli mode, and the GEAR ch. in airplane mode). 50% is the dividing line, when sensitivity value is greater than 50%, it is the normal mode, the greater the sensitivity is, even more stable the aircraft is. So I advise beginners to adjust it to about 80% on the first flights. When the sensitivity value is less than 50%, it is in 3D mode, the smaller the sensitivity is, even more stable the aircraft is. At the same time the action of control is large, suitable for experienced users.

G. Transmitter Settings

This is my settings for Spektrum DX6i

Model: HELI

Reverse: THRO=R; AILE=R; ELEV=R; RUDD=R;

D/R: Is set to 70% on all the channels (now it is very easy to fly)

Swash Type: 1 SERVO NORM

Swash Type: 1 SERVO NORM Single Servo mode no mixing