

# Q-BOT Micro Quadcopter Flight Control

## Specification:

Remote control distance: more than 80 m

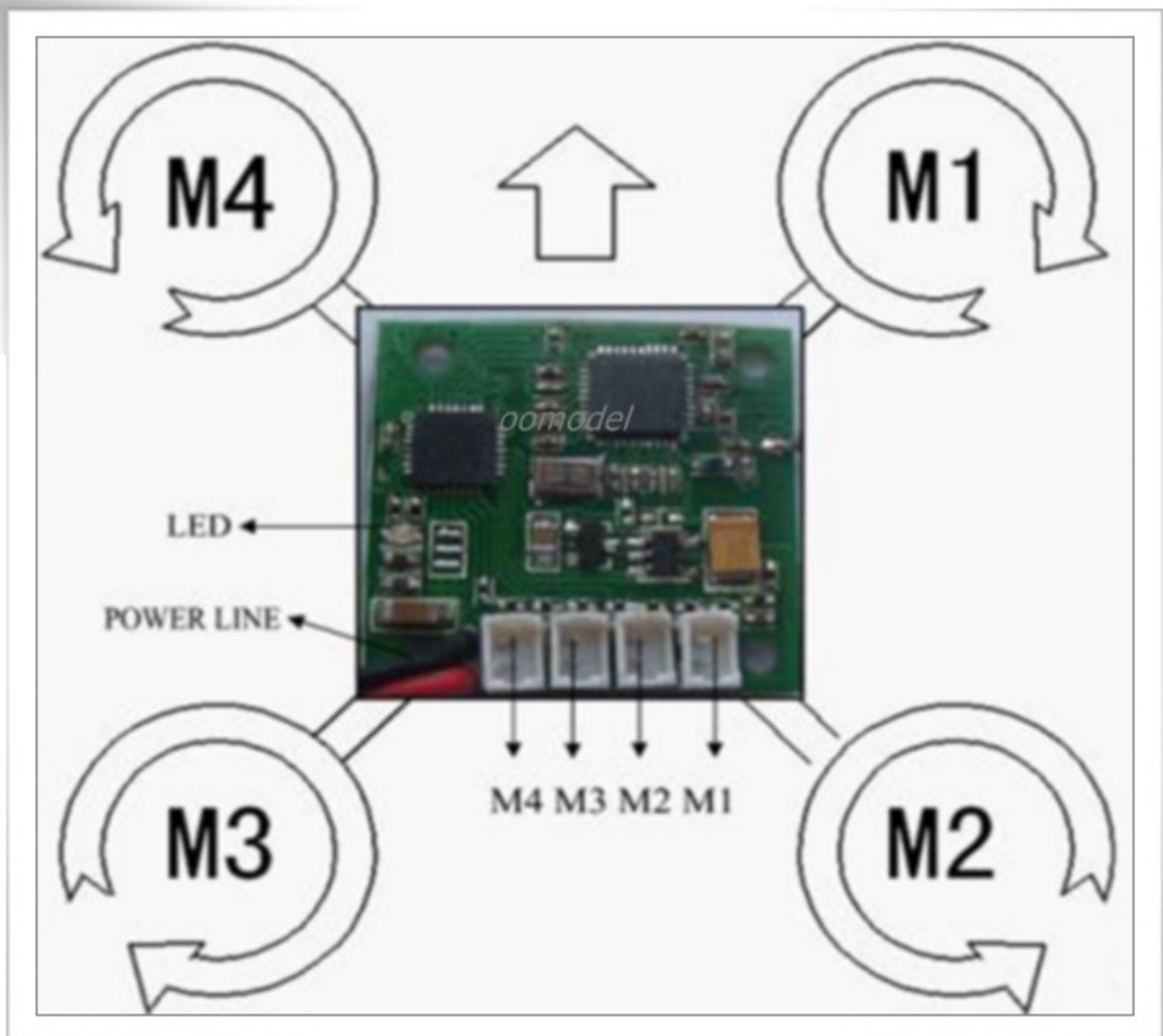
Drive motor current: 1500 mA

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 receiver 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)

*I don't know if this is only on my radio BUT all channels are set to reverse...*

### B. Bind

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

*Do NOT turn on the transmitter at first, but power on the Q-BOT (put in battery). Wait for LED to start blinking fast, the Q-BOT will now be in frequency 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 next flight, but turn the transmitter 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 ON, and joystick is in the bottom. The LED is not lit during waiting for the remote control signal. If no signal is received within the specified time, then reenter the frequency 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 (GEAR). 50% as 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 we advise beginner to adjust it to about 80 on the first flights. When the sensitivity value is less than 50%, it is 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 50% 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