

TURNIGY[®]
power systems



Integrated PCB Micro Quad PNP

WARNING

Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result serious injury or damages to personal property. This model is NOT a toy and It must be operated with caution. [Seek assistance from an experienced modeler](#) if you are not confident with remote control models. This product must not be operated by children without the supervision of a responsible adult.

As the user of this product, you are solely responsible for damages to the product, property or others. This model is controlled by a radio signal subject to interference from many sources outside your control. This interference can cause momentary loss of control so it is advisable to always keep a safe distance in all directions around your model, as this margin will help avoid collisions or injury.

- Never operate your model with low transmitter batteries.
- Always operate your model in an open area away from cars, traffic or people.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, battery packs, radio equipment etc.)
- Keep all small parts and anything electrical out of the reach of children.
- Moisture causes damage to electronics. Avoid water exposure to all equipment not specifically designed

Do Not work on your Micro Quad while the battery is plugged in.

Do Not install the propellers until the final stages are complete and you are ready for the first flight.

Specification:

Width: **250mm**

Height: **85mm**

Motor: **4 x Turnigy T1811-2900kv Brushless**

ESC: **4 x Turnigy Plush 6A**

Props: **4 x 5x3 inch (2CW & 2CCW)**

Controller: **Hobbyking Multi-Rotor Control Board** (X configuration)

Included in box:

1 x Turnigy Integrated PCB Plug and Fly Micro Quad (motors/ESCs/control board pre-installed)

4 x Propellers (2CW & 2CCW)

4 x Servo extension leads (for connecting receiver to control board)

Required:

500-900mAh 2S 7.4V Lipoly Battery

4 channel transmitter and receiver

Battery Charger

User Guide

Thank you for purchasing the Turnigy Integrated PCB Plug and Fly Micro Quadcopter! This PNF quad takes all of the guesswork out of choosing your electronics, arriving with the motors, ESCs and multi-rotor control board pre-installed. You simply need to add your own 4ch transmitter/receiver system, 500-900mAh 7.4V lipoly battery, and this quad is ready to fly!

The Turnigy PNF Micro Quadcopter comes pre-setup out of the box, but you will still need to configure your transmitter and conduct a pre-flight check before attempting to fly. Please follow the instructions below prior to your first flight with this model.

Setting up your transmitter:

Create a new model memory (fixed wing mode) and make sure that all mixes are disabled, all trims are neutral and that all End Point Adjustments (EPA) and D/R (dual rates) are set to 100%. Then bind your receiver to the transmitter.

Initial transmitter EPA/servo travel adjust settings:

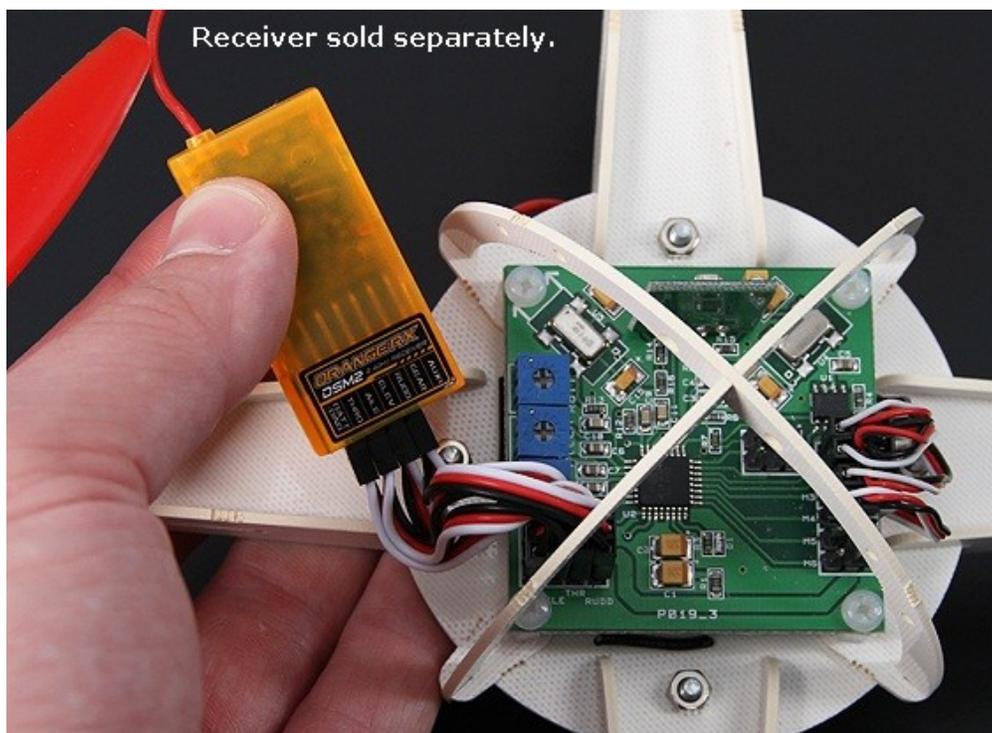
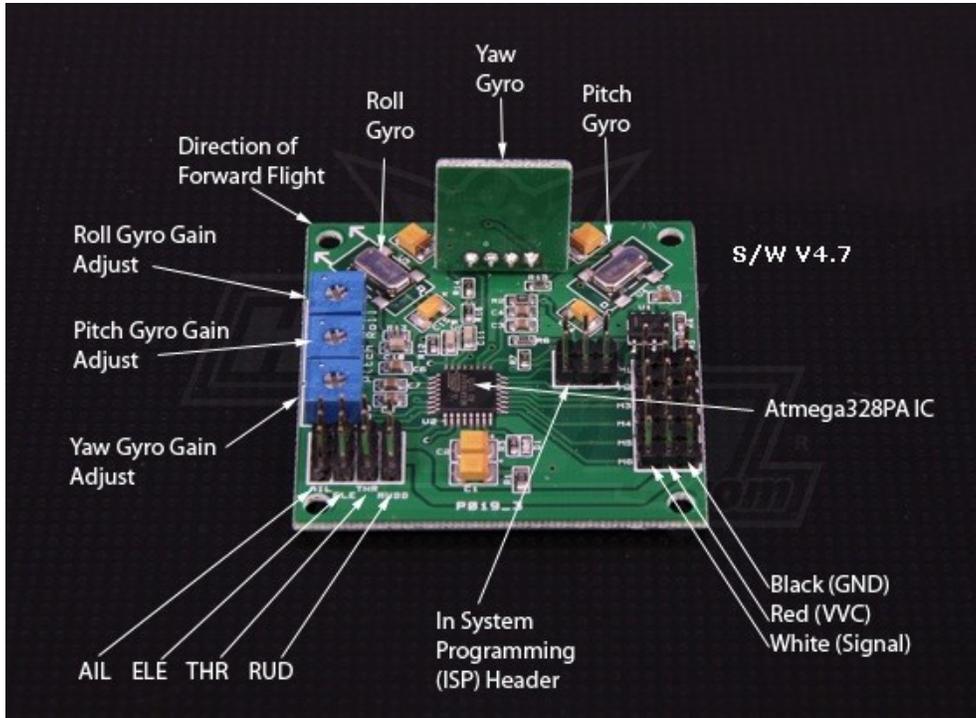
-pitch (elevator): 50%

-roll (aileron): 50%

-yaw (rudder): 100%

Connecting your receiver to the flight control board:

Connect your throttle, aileron, elevator and rudder channels to the appropriately labeled ports on the flight control board (see photos below for reference).



IMPORTANT!!

ESC throttle range calibration:

- Turn yaw pot to zero.
- Turn on transmitter.
- Move throttle stick to full position.
- Turn on flight controller.
- Wait until the ESC's beep twice after the initial beeps. (Plush ESCs)
- Move throttle stick to low position. ESCs beep.
- Turn off flight controller.
- Restore the yaw pot.

Checking transmitter channels:

- Turn on transmitter and flight controller.
- Set throttle to about 1/4. Motors should start.
- Move pitch (elevator) stick forward. Back motors should speed up. If not, reverse pitch (elevator) channel.
- Move roll (aileron) stick to the left. Right motors should speed up. If not, reverse roll (aileron) channel.
- Move yaw (rudder) stick to the left. Front and back motors should speed up. If not, reverse yaw (rudder) channel.

Checking gyro directions:

- Turn on transmitter and flight controller.
- Set throttle to about 1/4. Motors should start.
- Tilt quad forward. Forward motors should speed up. If not, reverse pitch gyro. (see next section for gyro reversing instructions)
- Tilt quad to the left. Left motors should speed up. If not, reverse roll gyro. (see next section for gyro reversing instructions)
- Turn quad CW. Front and back motors should speed up. If not, reverse yaw gyro. (see next section for gyro reversing instructions)

Reversing gyros (if required):

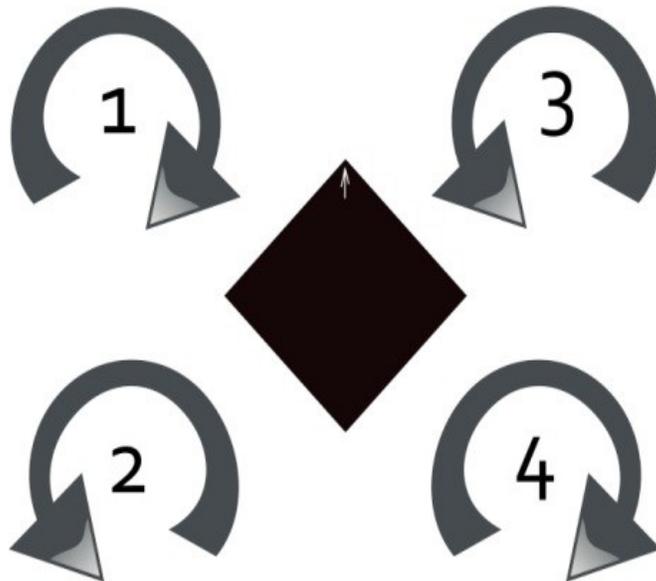
- 1: Set roll gain pot to zero.
- 2: Turn on flight controller.
- 3: LED flashes rapidly 10 times.
- 4: Move the stick for the gyro you want to reverse.
- 5: LED will blink continually.
- 6: Turn off flight controller.
- 7: If there is more gyros to be reversed, go to step 2, otherwise set roll gain pot back.

Propeller Installation

Install the propellers (see photo below for reference):



Be sure to install propellers in the correct rotation direction (see photo below for reference):



**DO NOT INSTALL PROPELLERS UNTIL THE FINAL STAGE
DO NOT WORK ON YOUR QUAD WHILE THE BATTERY IS PLUGGED IN**