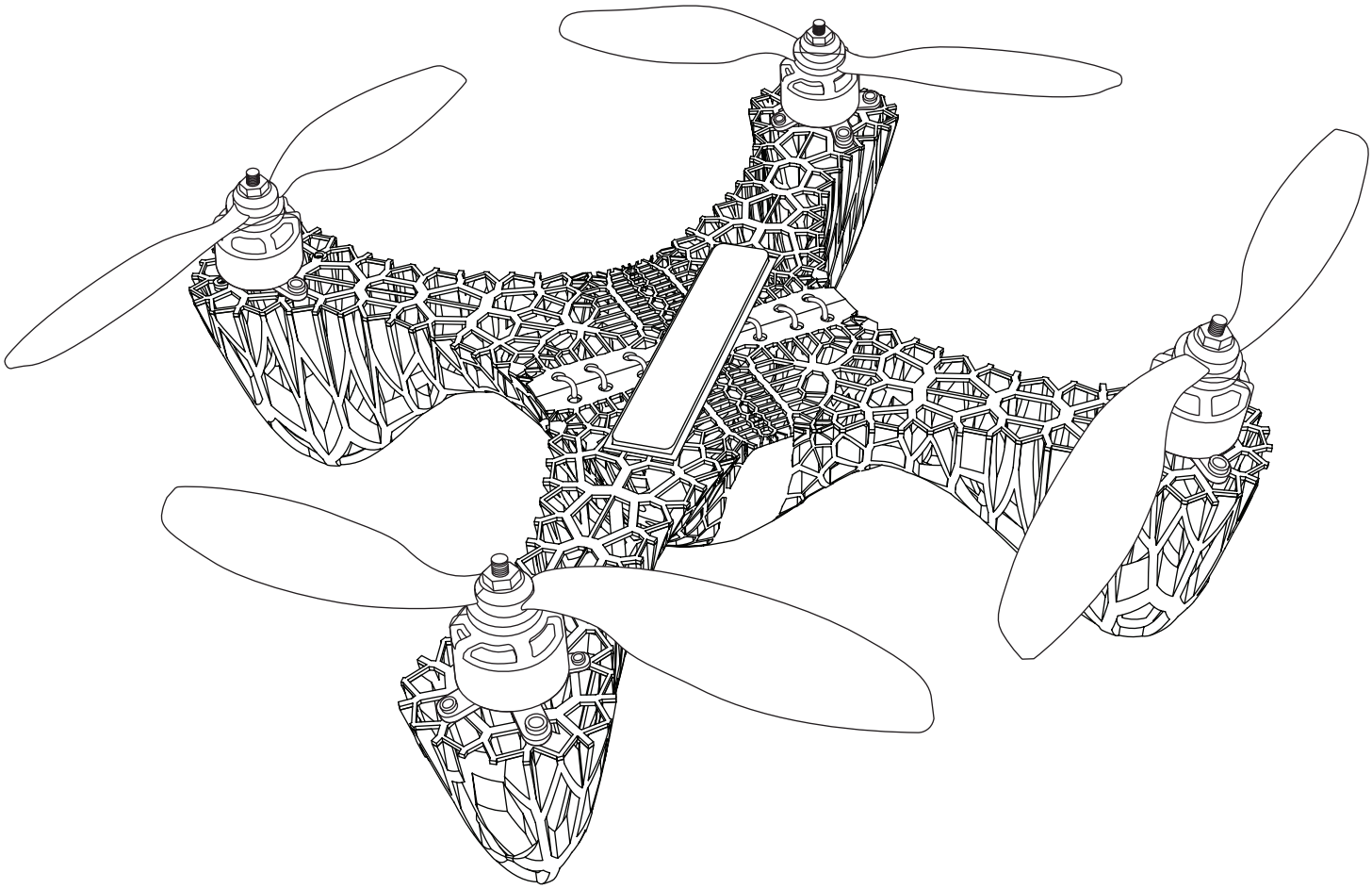
Skeleton X-14 Quadcopter



CubePro®
PRINTABLE

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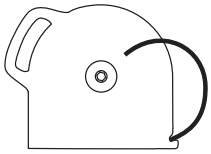
What you'll need

CubePro

+



Cartridges

+

QUADCOPTER 3D FILES
Download at:
www.Cubify.com/quadcopter

+

ELECTRONIC COMPONENTS
(Listed below)

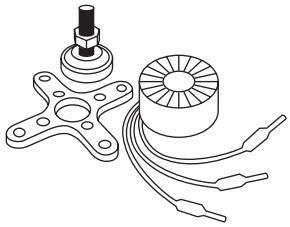
Print settings and material:

We recommend printing in ABS.

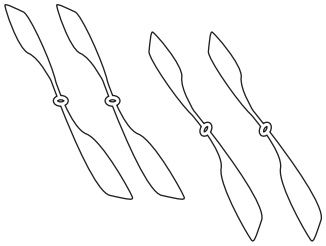
Layer resolution: 200 microns
Print Strength: solid
Print Pattern: diamonds

3D print time:
Allow about 26 hours to print both pieces of the quadcopter frame.

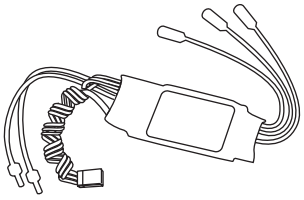
Electronic components can be purchased online.
We found a complete buying guide at: www.hovership.com/2012/12/06/beginner-quadcopter-kit-buying-guide



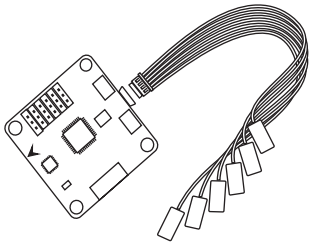
SUNNYSKY X2208-1500KV II 2-3s Outrunner Brushless Motor (x4)



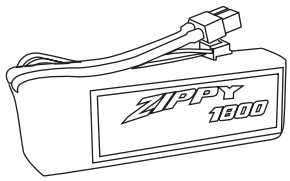
8045 SF Propellers 2pc Standard Rotation/2 pc RH Rotation (x1)



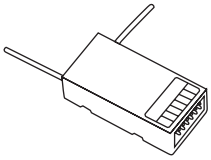
Turnigy Multistar 20 AMP Multi-rotor Brushless ESC 2-4S (x4)



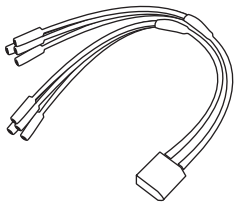
OpenPilot CC3D Flight Controller and OpenPilot RC Receiver Cable (x1)



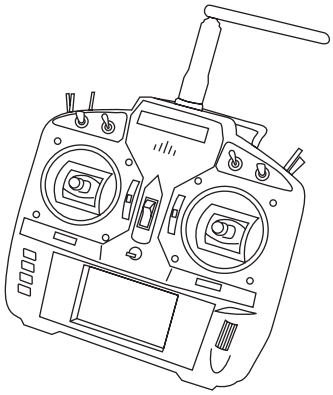
ZIPPY Flightmax 1800mAh 3S1P 20C (x1)



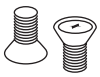
OrangeRx R615 Spektrum DSM2 6Ch 2.4Ghz Receiver (x1)



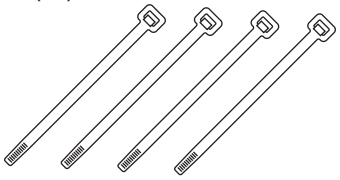
XT60 to Multistar ESC Power Breakout Cable (x1)



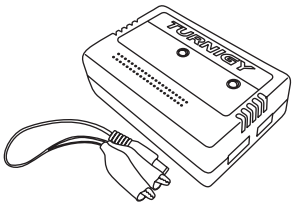
OrangeRx T-SIX 2.4GHz DSM2 6CH Transmitter (x1)



M3X8 Hex Bolt Cap Screw (x16)

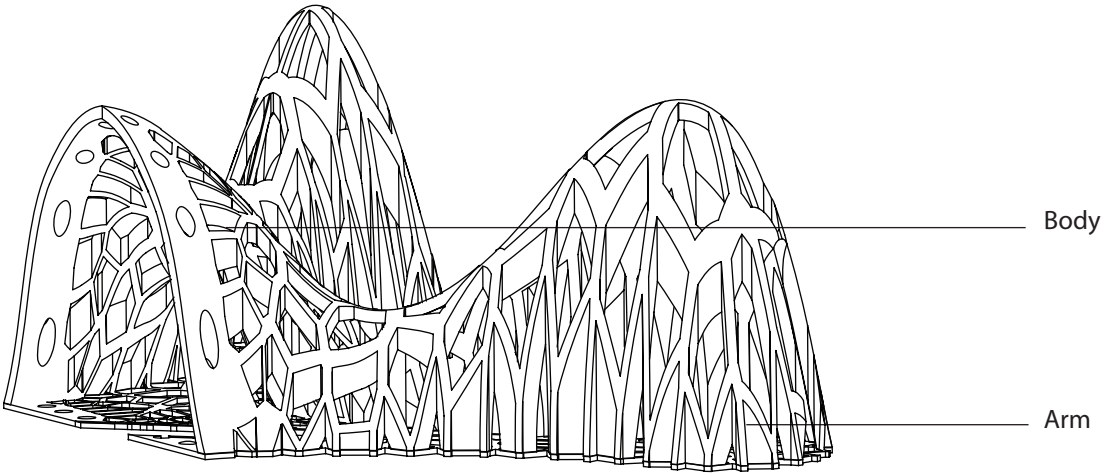


Zip ties
(x4 or more)



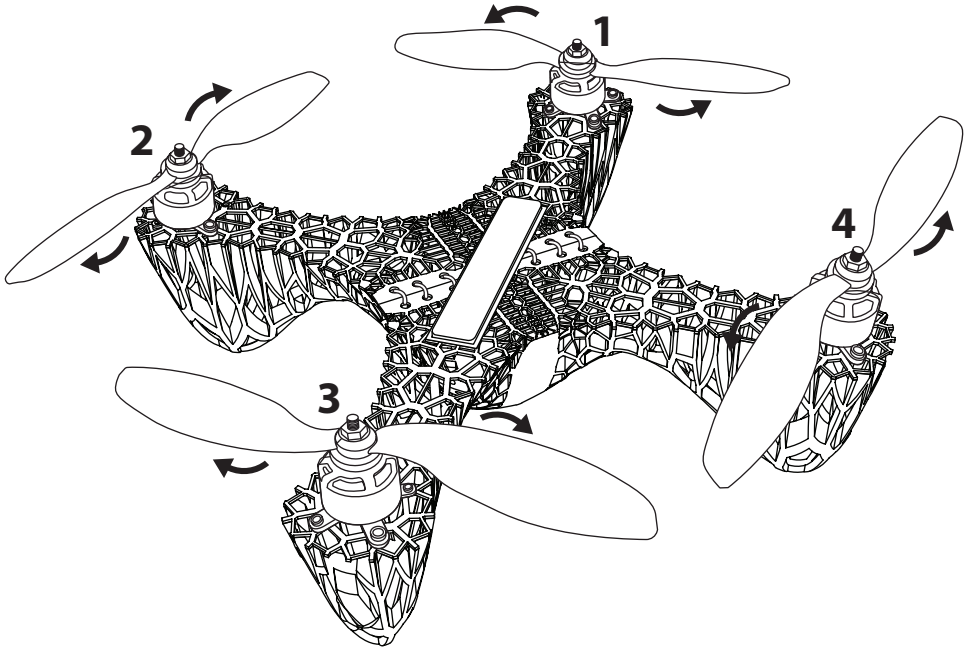
Turnigy 2-3S Balance Charger. Direct 110/240v Input (x1)

Print frame

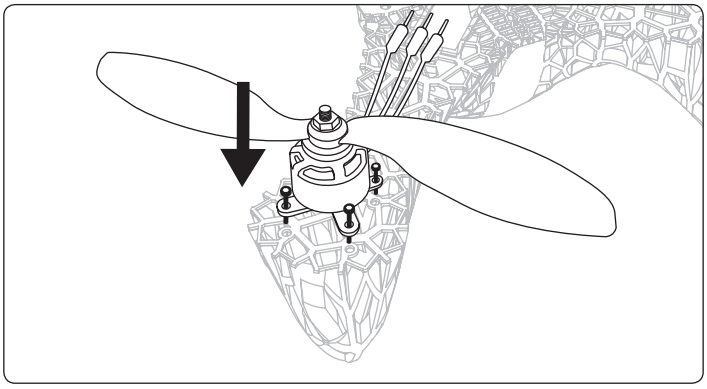


Download the Skeleton X-14 Quadcopter frame file from www.cubify.com/quadcopter. Print the file on your CubePro 2 times.

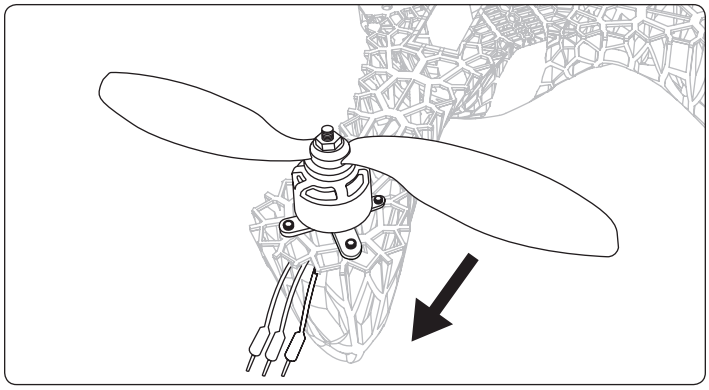
Assemble quadcopter & electronics



Tip: Assign a number to each arm of the quadcopter to ensure correct assembly of motors and electronics. Mount the standard rotation propellers (rotating clockwise) on arms 2 and 3. Mount the RH rotation propellers (rotating counter-clockwise) on arms 1 and 4.

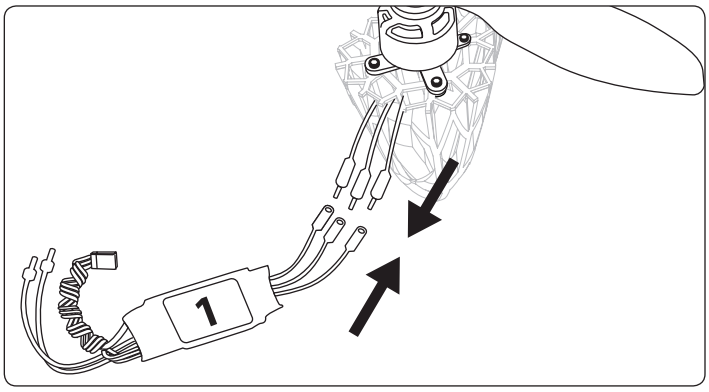


STEP 1
Screw motors in, matching the holes in the motor with the holes in the quadcopter frame. Face wires towards the body.

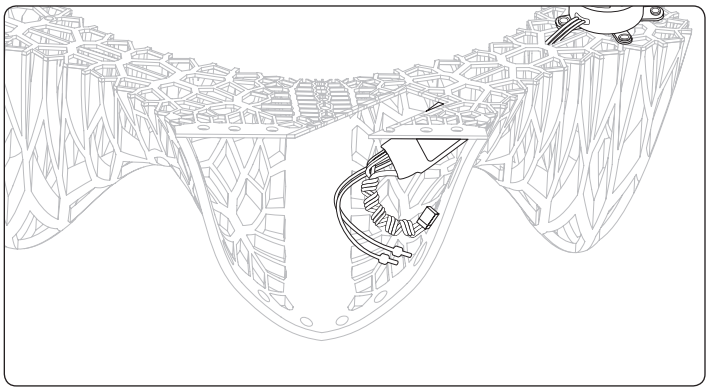


STEP 2
Thread wires into the frame through any opening and out through the end of the arm.

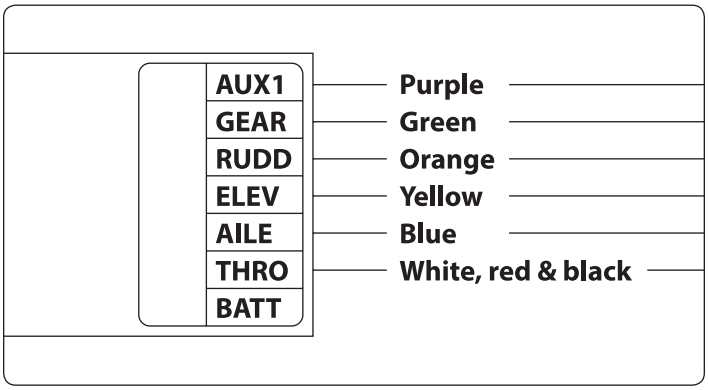
Assemble electronics (cont')



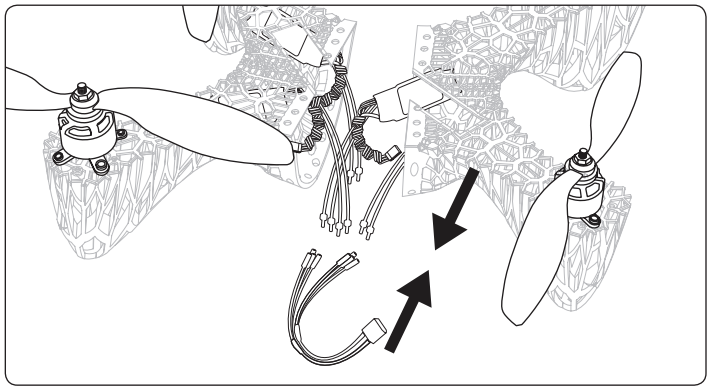
STEP 3
Label the ESCs at the front of the quadcopter 1 & 2. Label the ESCs on the back of the quadcopter 3 & 4. Hook up an ESC to a motor by connecting the wires: black with black, red with red and blue with yellow.



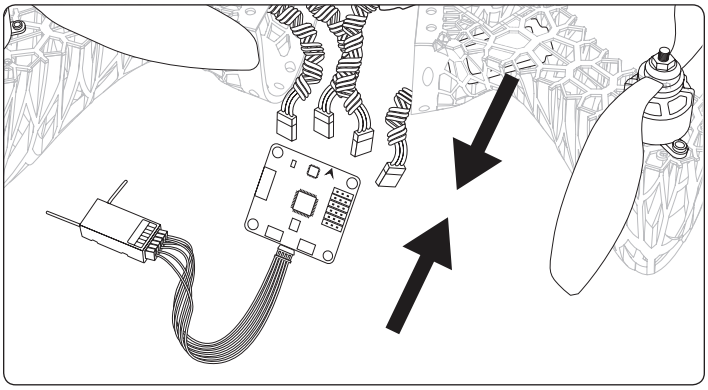
STEP 4
Tuck the ESC wires back into the arm. The ESC wires should come out of the body of the frame. Repeat step 1-4 for each motor.



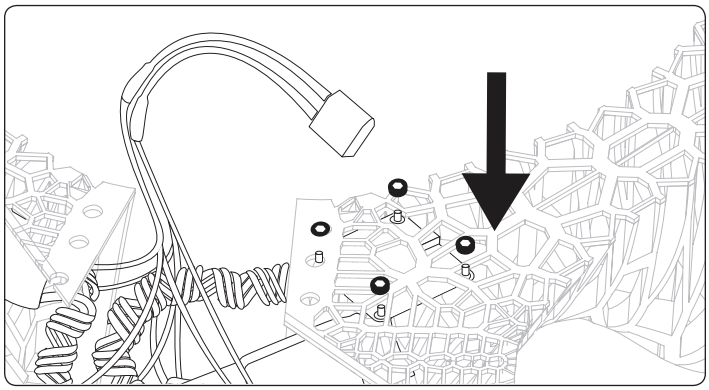
STEP 5
Connect the receiver cables to the receiver in the above order. Make sure the exposed side is facing downward. Set it aside.



STEP 6
Connect the ESCs to the ESC Power Breakout Cable: Red to red, black to black.

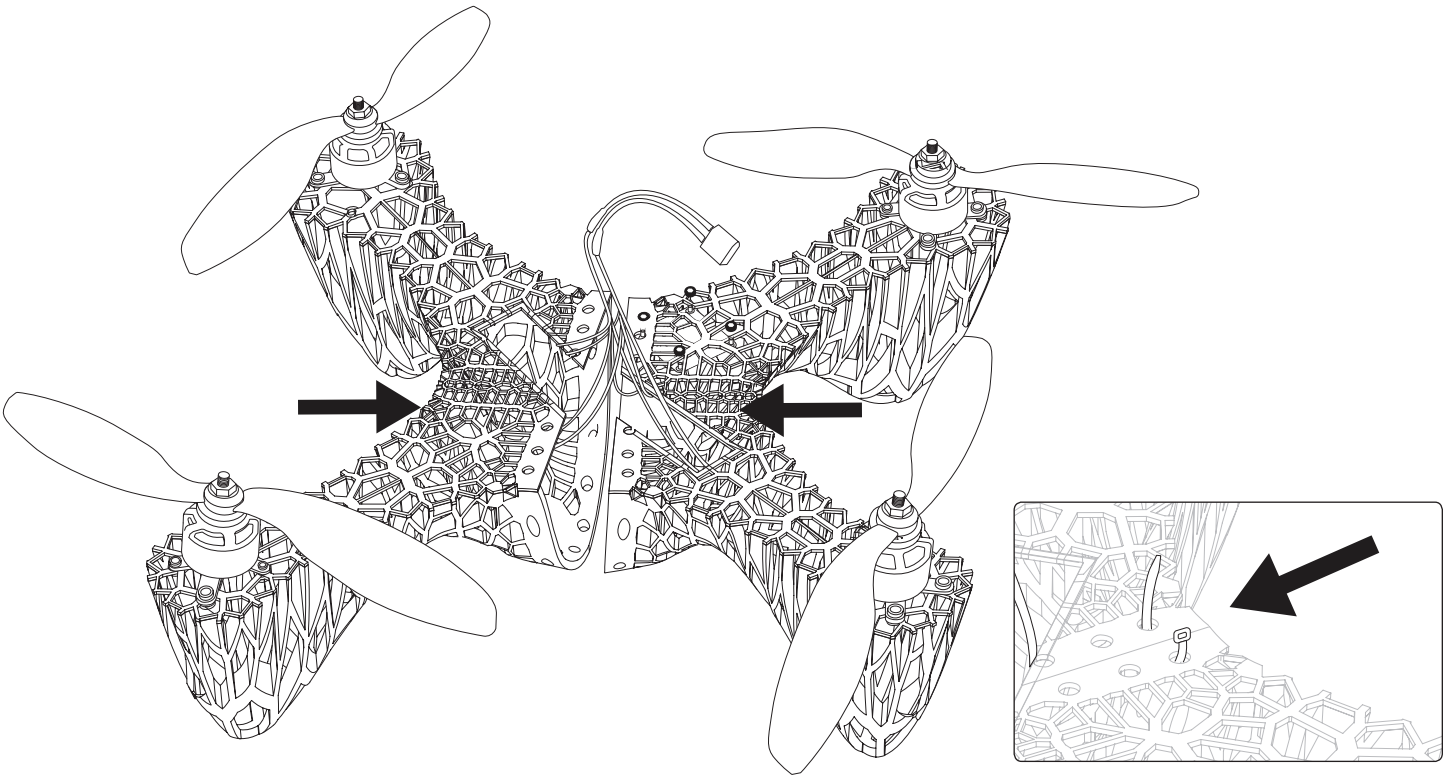


STEP 7
Connect the ESC to the flight controller by matching the number on the ESC (as labeled in STEP 3) to the number on the controller.

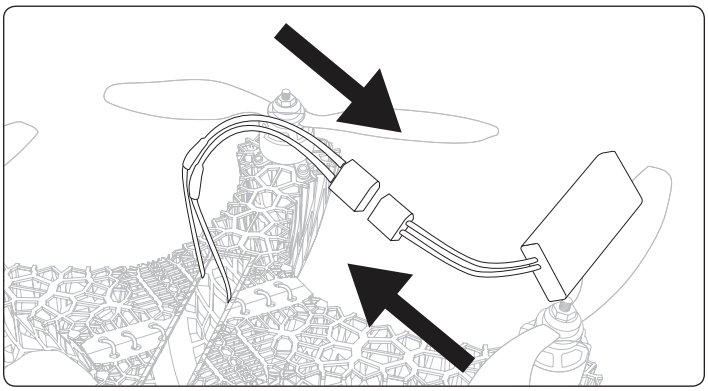


STEP 8
Mount the controller by using the M3x8 bolts.

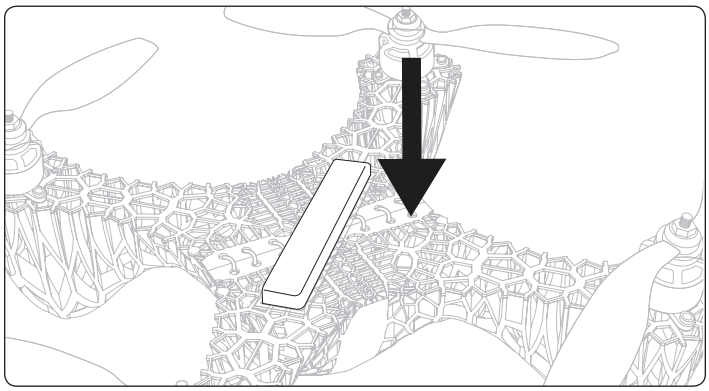
Assemble electronics (cont')



STEP 9
Tuck all the wires inside the body except for the ESC Power Breakout Cable. Use the 4 zip ties to secure the 2 halves of the frame together. Use more zip ties if desired.



STEP 10
Connect the ESC power breakout cable to the battery.

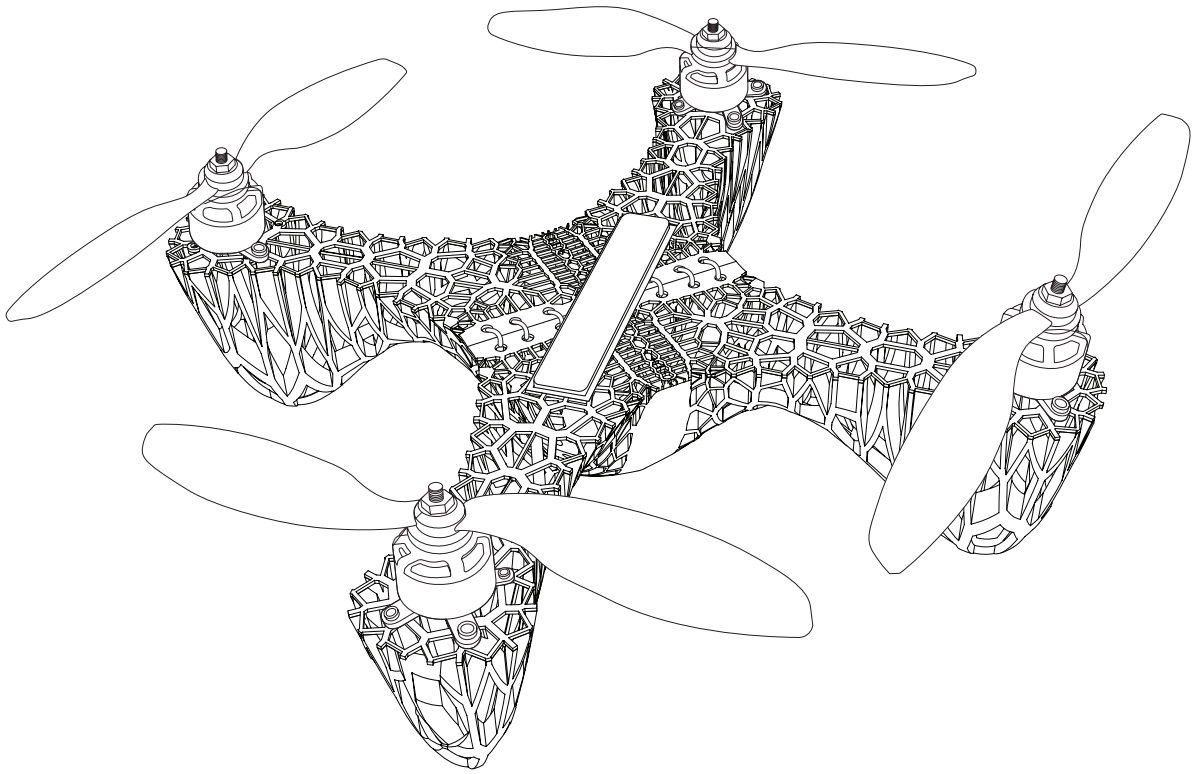


STEP 11
Tuck the ESC power breakout cable and the battery cable inside the quadcopter. Push the battery carefully through the slot located in the center of the quadcopter.

Assemble electronics (cont')

COMPLETE ASSEMBLY

Congratulations! You have assembled your Skeleton X-14 Quadcopter.



Software setup

To fly your quadcopter, simply connect the controller to your computer with a mini USB cable. Be sure to complete the software setup. Now take your quadcopter for a test flight.