



ReedQuad260

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Published on: Feb 09, 2015

Located at: <http://www.youmagine.com/designs/reedquad260>

Short description:

My very first full 3D printed quadcopter for FPV

Description:

<p>The target was to build a simple non foldable quadcopter for funflying, keep price low and use widely available components.</p>
<p>Check 3D PDF for overview - open in Acrobat Reader</p>
<p> Why ReedQuad260?</p>
<p>When I was building the quad and finished first prototype the shape and colors recalled this childish character. See uploaded pictures.</p>
<p>The Reedman :) - so here comes Reed</p>
<p>Quad - that is clear - four motors</p>
<p>260 - motor to motor distance in millimeters</p>
<p>Weight: 423g ready to flight - without landing skids, without Mobius, without Mobius holder

<p>COG: without Mobius slightly tail heavy, otherwise - in center

<p>To Do list</p>
<p>Photo guide of the assembly process.</p>
<p>Landing skids - frame has embedded nuts ready to use.</p>
<p>Printed parts</p>
<p>Main plate parts</p>
<p>Main_plate_bot.stl 28g</p>
<p>Main_plate_top.stl 18g</p>
<p>Secondary plate parts</p>
<p>Top_plate_v2.stl 77g</p>
<p>Diet_30mm.stl 77g</p>
<p>Other parts</p>
<p>Arm_v2.stl 7.2g</p>
<p>ESC_holder.stl 0.2g</p>
<p>Cam_holder.stl 77g</p>
<p>Mobius_plate.stl 77g</p>
<p>Printer settings</p>
<p>0.2mm per layer all parts</p>
<p>Arms</p>
<p>80% filling</p>
<p>0.8mm walls</p>
<p>0.6mm top/bot</p>
<p> Plates</p>
<p>50% filling</p>
<p>0.8mm walls</p>
<p>0.6mm top/bot</p>
<p>Spacers</p>
<p>100% filling</p>
<p> Mechanical Parts</p>
<p>Screws</p>
<p>DIN912 M3x35 8x - Frame</p>
<p>DIN912 M2x6 6x ESC holders</p>
<p>DIN912 M2x8 2x - Cam mount</p>
<p>DIN912 M2x4 4x - Distributor</p>
<p>Nuts</p>
<p>M3 8x</p>
<p>M2.5 16x</p>
<p>Accessories</p>
<p>25cm 3mm OD bowden tube</p>
<p>5 zipties</p>
<p>Velcro tape - rx and battery mounting</p>
<p>Distributor -20x20mm FR4 board with 16x4.6mm M2 hole spacing - see attached drawing</p>
<p>12x male Gold connectors 2mm - ESC - Motor Connection</p>
<p>20cm red/black AWG16 cable</p>
<p>Wires, connectors for RX - FC connection, ESC - FC connection, Distributor</p>
<p>VTX, VTX - Cam</p>
<p>4pcs Mobius Damping ball</p>
<p>rele="nofollow" target="" blank" href="http://www.hobbyking.com/hobbyking/store/_55697_Vibration_Damping_Ball_50gram_8_pcs_bag_EU_Warehouse.html">http://www.hobbyking.com/hobbyking/store/_55697_Vibration_Damping_Ball_50gram_8_pcs_bag_EU_Warehouse...</p>
<p>2pcs battery straps - VTX</p>
<p>rele="nofollow" target="" blank" href="http://www.hobbyking.com/hobbyking/store/_11736_Turnigy_Battery_Strap_330mm.html">http://www.hobbyking.com/hobbyking/store/_11736_Turnigy_Battery_Strap_330mm.html</p>
<p>2pcs battery straps</p>
<p>rele="nofollow" target="" blank" href="http://www.hobbyking.com/hobbyking/store/_12984_Battery_Strap_5pcs_bag.html">http://www.hobbyking.com/hobbyking/store/_12984_Battery_Strap_5pcs_bag.html</p>
<p>rele="nofollow" target="" blank" href="http://www.surveilzone.com/5.8g-8ch-200mw-fpv-wireless-av-tx-transmitter-ws1141">http://www.surveilzone.com/5.8g-8ch-200mw-fpv-wireless-av-tx-transmitter-ws1141</p>
<p>rele="nofollow" target="" blank" href="http://www.surveilzone.com/fpv/fpv-camera/sony-super-had-ccd-600tv-fpv-block-camera-2.8mm-lens">http://www.surveilzone.com/fpv/fpv-camera/sony-super-had-ccd-600tv-fpv-block-camera-2.8mm-lens</p>
<p>rele="nofollow" target="" blank" href="http://www.surveilzone.com/5.8g-circular-polarized-psma-4x-antenna-right-angle-pa1236">http://www.surveilzone.com/5.8g-circular-polarized-psma-4x-antenna-right-angle-pa1236</p>
<p>rele="nofollow" target="" blank" href="http://www.hobbyking.com/hobbyking/store/_55819_AfroFlight_Naze32_Acro_AbuseMark_FunFly_Controller.html">http://www.hobbyking.com/hobbyking/store/_55819_AfroFlight_Naze32_Acro_AbuseMark_FunFly_Controller...</p>
<p>rele="nofollow" target="" blank" href="http://www.banggood.com/ZMR-1804-2400KV-Micro-Size-Integration-Outrunner-Bushless-Motor-p-923424.html">http://www.banggood.com/ZMR-1804-2400KV-Micro-Size-Integration-Outrunner-Bushless-Motor-p-923424.ht...</p>
<p>rele="nofollow" target="" blank" href="http://www.banggood.com/Gemfan-5x3-Inch-Plastic-5030-Propeller-CWCCW-For-240-250-Fram-p-937866.html">http://www.banggood.com/Gemfan-5x3-Inch-Plastic-5030-Propeller-CWCCW-For-240-250-Fram-p-937866.html</p>
<p>rele="nofollow" target="" blank" href="http://www.hobbyking.com/hobbyking/store/_64209_Afro_ESC_12Amp_OPTO_Ultra_Lite_Multi_rotor_Motor_Speed_Controller_SimonK_Firmware_Version_3.html">http://www.hobbyking.com/hobbyking/store/_64209_Afro_ESC_12Amp_OPTO_Ultra_Lite_Multi_rotor_Motor_Speed_Controller_SimonK_Firmware_Version_3.html"></p>

If you can, please use the online documentation found at <http://www.youmagine.com/designs/reedquad260> because those may have been updated. Also, there you can interact and provide praise and/or feedback.