

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## $\Delta$ WARNING! READ THIS BEFORE ASSEMBLY OR OPERATION!

## Failure to read and abide by these warnings and precautions could result in bodily injury or property damage.

- WARNING: LACERATION HAZARD. Rotating and stationary ELEV-8 v3 quadcopter rotors can cut skin and underlying tissues. Stay away from a powered ELEV-8 quadcopter; never become complacent during operation.
- WARNING: ENTANGLEMENT HAZARD. Secure long hair and loose clothing or jewelry when building, testing, customizing, and operating your ELEV-8 v3 guadcopter to avoid entanglement with motors.
- WARNING: EYE HAZARD. Always wear eye protection when performing or observing ELEV-8 v3 quadcopter assembly, repair, customization, operation, or flight.
- WARNING: ELECTRIC SHOCK HAZARD. Never handle the ELEV-8 Flight Controller, the ELEV-8 Power Distribution Board, or any electrical connections on the ELEV-8 v3 quadcopter while the battery is connected. It is your responsibility to ensure that all electrical parts are properly protected, isolated, and insulated.
- Review and abide by the Academy of Model Aeronautics "National Model Safety Code" and "Utilizing Failsafe, Stabilization, and Autopilot systems."
- Customer agrees to maintain their own liability insurance.
- Inform yourself of and follow all current federal, state, and local laws applicable to your intended use of your quadcopter in the area where you plan to operate your ELEV-8 v3. Review the FAA's rules in their entirety; you are responsible for following them.
- An ELEV-8 v3 quadcopter assembled and used as directed in this document is a teleoperated hobby model UAV and does not constitute the use of an autonomous Unmanned Aircraft (UA). Any change or modification you make to the hardware or firmware is done so at solely your own risk.
- This kit is not for beginners. Intermediate to advanced mechanical skill is required for building and flying an ELEV-8 v3 quadcopter. RC aircraft experience is highly recommended.

- Follow the assembly and operating instructions carefully; incorrect assembly
  of, negligent use of, or lack of maintenance to your ELEV-8 v3 quadcopter
  could cause risk of catastrophic equipment failure, bodily injury to you or
  others, and property damage.
- For every transmitter used, perform a range check of the radio link between the RC transmitter and RC receiver without the propeller blades installed.
- WARNING: Lithium-Ion Polymer (LiPo) batteries are volatile. Failure to understand and abide by all safety instructions and warnings for your battery/charger may result in fire, personal injury and property damage. Always disconnect and store the battery in an appropriate container when not in use.
- Store your ELEV-8 v3 quadcopter and all related items out of reach of children, pets, and those who do not know how to use them safely.
- Only operate your ELEV-8 v3 quadcopter in an area with no people, birds, unsecured pets, or livestock, which can be harmed by contact with rotating blades. For example, children and dogs may try to jump and catch a flying quadcopter, or may run to investigate one that has just landed.
- Do not operate your ELEV-8 v3 quadcopter in confined spaces, crowded areas, or within 25 feet of any potential hazards. All observers should wear eye protection and stand a safe distance *behind* the operator.
- Only operate your ELEV-8 v3 quadcopter in an environment where you can maintain unobstructed visual contact with it. Do not operate at night, or where there is fog, smoke, or dust that could limit visibility.
- Keep your ELEV-8 v3 quadcopter dry! Do not submerge your ELEV-8 v3 quadcopter or operate it in rainy or damp conditions. Beware of sprinklers and of landing in wet vegetation.
- Check the wind speed before flying your ELEV-8 v3 quadcopter. Even a light breeze can make flying difficult for beginners. No one should fly in high winds.

DISCLAIMER OF LIABILITY: PARALLAX INC. IS NOT RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES AND PERSONAL INJURIES, INCLUDING THAT TO LIFE AND HEALTH, RESULTING FROM THE CUSTOMER'S APPLICATION AND USE OF ANY PARALLAX INC. PRODUCTS INCLUDING THE ELEV-8 V3 QUADCOPTER. YOU, THE CUSTOMER, ASSUME FULL AND UNLIMITED RESPONSIBILITY FOR ALL OF YOUR ELEV-8 V3 QUADCOPTER APPLICATIONS AND USES.

## **ELEV-8 Quadcopter v3 Assembly Instructions**

- 1. READ THE IMPORTANT SAFETY INFORMATION ON THE OTHER SIDE OF THIS PAPER BEFORE BEGINNING ASSEMBLY!
- 2. Go to <a href="http://learn.parallax.com/elev-8">http://learn.parallax.com/elev-8</a> to access the ELEV-8 v3 Assembly Guide. (Note: Be sure to select v3; older versions are posted.)
- 3. Inventory each bag in your ELEV-8 v3 Quadcopter Kit using the Bill of Materials below. If you are missing any parts, contact <a href="mailto:sales@parallax.com">sales@parallax.com</a> directly for assistance. (Note that some items are small sub-kits with parts not listed separately. Parts and quantities subject to change without notice.)

ELEV-8 Quadcopter v3 Kit Contents (#80300)			ELEV-8 v3 Electronics Kit Contents (#80370)			ELEV-8 v3 Hardware Kit Contents (#80360)		
Part #	Qty	Description	Part #	Qty	Description	Part #	Qty	Description
80204	1	ELEV-8 v3 Flight Controller	750-90010	4	KEDA 1000kV Outrunner Motor	570-80061	1	ELEV-8 Saddle Washer 24-pack
700-10003	1	Safety Eyewear	750-90015	4	Parallax xRotor 20A ESC	570-80300	1	ELEV-8 v3 Hardware Pack
721-80040	2	Propeller, 11x4.5 MRP, L, 2-pack	800-00040	1	3-wire extension cable, 4"	700-00098	4	Vibration Damper, 80g
721-80041	2	Propeller, 11x4.5 MRP, R, 2-pack	800-00043	6	3-wire ext. cable, 6", beveled plug	700-00099	12	Zip Tie, 5.9"
80350	1	ELEV-8 v3 Airframe Kit	80361	1	ELEV-8 Power Distribution Board	700-00106	1	Loctite 242
80360	1	ELEV-8 v3 Hardware Kit				700-00140	4	Grommet, fits 3/8" dia x 1/32"
80370	1	ELEV-8 v3 Electronics Kit	ELEV-8 v3 Airframe Kit Contents (#80350)			700-00145	4	Plug, fits tube 3/4" outer dia.
			Part #	Qty	Description	700-10025	1	Parallax Combination Wrench
			721-80007	4	ELEV-8 Landing Gear	725-00067	1	1.5 mm Hex Key
			721-80301	1	ELEV-8 v3 FC Cover	900-00021	2	Hook and Loop Cable Tie
			721-80302	1	ELEV-8 v3 Isolation Plate	900-00105	4	Inches of Adhesive Foam Strip
			721-80303	1	ELEV-8 v3 Top Chassis Plate	900-00106	1	Foam cube, black open-cell
			721-80304	1	ELEV-8 v3 Bottom Chassis Plate			
			721-80305	4	ELEV-8 v3 Motor Mount			
			730-00065	2	ELEV-8 v3 Boom, Clear			
			730-00066	2	ELEV-8 v3 Boom, Blue			

**Revision History**: v1.0: Original release.