

Alchemy Pro

Information Sheet

Features

- Larger, more forward canopy shape than the original Alchemy allows for more **powerful knife edge performance** and modern aesthetics.
- The increased turtle deck height from the original Alchemy enables **smoother** and more **predictable yaw** control.
- A taller rudder over the original Alchemy gives better aerodynamic resolution in yaw and **enhanced stall turn performance**.
- The finish is hand painted with a single stage paint and clear coat for **beautiful depth and long lasting color protection**. We hand select colors with several metallic shades and expertly applied color fades for a stunning product.
- A **phenolic doubler** is pre-installed on the nose by the factory for easier motor installations.
- The rudder is designed for a rear mounted servo in a push-pull configuration. The standard sized servo hole is pre-cut and the ply doubler is installed by the factory.
- Mounting blocks made from hard balsa are pre-installed in the control surfaces for **easy control horn installation** (Not designed for screw down type horns).
- A **new generation Herex** composite core material is used for unbeatable strength-to-weight ratio. **We go the extra mile** by sanding the Herex even thinner for the ideal strength-to-weight compromise.
- **Carbon fiber** is used strategically in the **landing gear** area of the fuselage layup to add strength and avoid those annoying repairs after the all-to-common landing mishap.
- **Incidence adjusters** for the **wings and stabilizers** come pre-installed from the factory. Bryan will ensure perfect alignment and incidence setup with our Designer's Touch service.
- Fillets are included where the wing meets the fuselage to aid in incidence setup and **add geometrical strength** to the fuselage - just another way **we go the extra mile**.
- **Quick release** canopy and chin cowl are mounted directly **from the factory** (Electric chin uses screws)
- Aileron hinges are made in the mold, allowing for a **gapless** design that stays **strong** and **flexible** after thousands of flights. We ensure the bevels allow for the 27+ degrees of aileron throw required for perfect snap rolls.
- The redesigned rudder post has a wider chord and double beveled design for **bind-free elevator-to-elevator rudder throw**. We leave the rudder detached in the box as many people opt for a removable, pin style hinge to make shipping easier.
- Elevators are skin hinged in the mold to **save weight** and **eliminate hinge gaps**. This design also allows for superior aerodynamic qualities and freedom of movement. (NOTE: Do not use pull-pull with this hinge design)
- Our **unique**, straight-legged landing gear system reduces weight and **eliminates** stress fractures and **failures** at the fuselage bend of standard gear legs. The specially designed tongue of each landing gear leg captures into a wedge shaped carbon receptacle with a single screw. Our system is the **lightest, strongest,**

simplest, and most care free landing gear solution in the world.

- In the spirit of continued improvement, we've recently engineered the landing gear box to making it **even stronger** . We're using a milled fiberglass filler to increase the strength of the glue and have fine tuned the fit of the structure to the fuselage.
- Ailerons and Elevators have been developed with unique longitudinal and ribbed **stiffeners** within the control surface. This structure keeps your control surfaces **straight, true, and solid** for **thousands** of flights.
- The wings include an exclusive, CK Aero designed foam insert in their core which has

been developed to increase **rigidity and longevity** throughout the hundreds of temperature cycles the airplanes are subjected to. We are **obsessive** about the integrity of our products!

- The leading edges of the wings and stabs also include exclusive, CK Aero designed foam inserts for **protection against the notorious exploding seams** some have experienced with other composite airplanes after a season or two.
- Bryan designed the Alchemy to accommodate ALL power plants, including contras. The Alchemy feels **no destabilizing effect from the contra**

Included in the Box

- Battery tray assembly kit, carbon reinforcement rods and velcro straps included
- Tailwheel assembly (wheel not included)
- Landing gear legs, wheel pants, and wheel axles
- Wing attachment nuts
- (Glow only) Fuel tank formers/mounts
- Phenolic control horns + aileron servo horn attachment (for perfect 27 degree aileron throw at 100% servo travel) - Upgraded carbon fiber set is available for purchase
- Complete cover set - Fuselage, Tail, Wings, and Stabs
- Carbon wing tube
- Carbon stab tube
- 2 Plywood elevator servo mounting plates sized for Futaba BLS173
- 1 Plywood rudder servo mounting plate (Spare)



Required to Complete

- Tx/Rx Radio System
- Propulsion Unit + Fuel/Battery
- Servos and extensions
- Control Linkages
 - Elevator: 70mm
 - Rudder: 100mm
 - Aileron: 70mm
- Clevises (ball bearing recommended)
- Rudder hinges (Robart medium pin hinges recommended)

