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Bigger and Badder than ever!

PRECISION AEROBATICS Addiction XL

Precision Aerobatics grabbed the best all-around airplane in their line-up and made it even better! The Addiction XL is a very forgiving 3D aerobat that is a real treat to fly. Despite not looking like a plane suited for precision aerobatics, the Addiction XL flies beyond expectation. At 59 inches, the Addiction XL is quite large and flies as if it were even larger. The incredibly rigid airframe easily withstands the rigors of hard-core 3D and the unique eye-catching graphics truly set this plane apart from the rest. The Addiction XL has amazing slow speed characteristics that had me well within my comfort zone even when close to the ground. Precision Aerobatics takes the guesswork of equipping your Addiction XL

by offering tried and proven accessory components that are performance-based. The Addiction XL is constructed using FiberFusion, a unique construction method developed by Precision Aerobatics, which uses carbon fiber stringers embedded in the balsa and the reinforcements throughout the model including the wing leading edge and tail. They combine carbon fiber, balsa and ply in a unique way, utilizing the strengths of the fibers within

each raw material, with the end result being lighter, stronger, more rigid aircraft that flies like nothing else!

ASSEMBLY

I received the Addiction XL as an iPA (Integrated Performance Airframe-Drive System) combo package which includes airframe, Thrust 50 brushless motor, prop adaptor, Quantum 70 amp speed control, carbon fiber servo arms, thin twisted servo lead wire, VOX 15x8 wooden prop and genuine Hitec metal gear servos. Not included in this combo package and available separately are carbon fiber vortex generators, carbon fiber spinner, Deans connectors and LiPo battery. A point worth mentioning is the fact that you save money when purchasing it as a combo over individually purchasing components. The model is constructed using Precision Aerobatics's FiberFusion technology along with the highest grade laser-cut balsa and plywood. The airframe is available in three different eye-catching color schemes, comes with two-piece wing, carbon fiber wing tube, carbon gear, painted fiberglass wheel pants and carbon reinforced fiberglass cowl, wheels, carbon fiber CNC-machined control horns, flex style hinges, carbon fiber pre-cut pushrods, CNC-machined metal clevises and friction-free German-made ball links, Kevlar pull-pull system with carbon fiber CNC-machined pull-pull servo arm, high-quality assortment of German-made hardware and photo-illustrated manual.

Assembly starts with installation of the horizontal stabilizer. The stab is self-aligning and fits securely in a slot in the fuselage after a small section



Author's Opinion

The Addiction XL might look like an anticlimactic blown-up version of the Addiction X but I can assure you that's where it stops. The Addiction XL gives new meaning to light wing loading and is one of the most rewarding 3D planes I've ever had the privilege of flying. The airframe is very rigid and loaded with carbon fiber reinforcements that eliminate performance-robbing flex. Despite the light loading, the Addiction XL tracks beautifully and penetrates well.

Key Features

- > Carbon fiber (FiberFusion) reinforcements throughout.
- > Combo packages eliminate guesswork and maximize performance.
- > Carbon fiber VG kit broadens flight envelope.
- > Super heavy-duty magnets ensure hatch will NEVER fall off in flight.
- > Two-piece removable wing with carbon spar.
- > Comes with DVD showing the Addiction XL performing 3D aerobatics
- > iPA Solution (Integrated Performance Airframe-Drive System)

Pros

- > Awesome flight characteristics
- > Rigid airframe using FiberFusion construction
- > Looks awesome

Cons

- > Tail wheel is fragile

PHOTOS BY WALTER SIDAS

IN THE AIR

Photo day was a beautiful one with a steady 10-knot breeze and temps in the low 70's. The Thrust 50 motor didn't care for rapid advancement of the throttle as there was a squeal and hesitation to accelerate. This has to do with set up of the speed control and was not noticed in flight. Ground handling was good, but the short carbon gear is a little on the stiff side. Advancing the power slowly had the Addiction XL easily airborne under half throttle. I climbed up and took my thumbs off the sticks to find that no trim changes were required. I flew back and forth for Walter, the photographer, at relatively low power settings, all the time experimenting with different attitudes. I was pleasantly surprised with control authority of the rudder and how well it tracks regardless of attitude. The combination of the "generously proportioned" fuselage and the vortex generators seemed to keep it chugging along no matter what. I did crank up the volume and did some higher-speed maneuvers and was delighted with how little coupling there was and how balanced the controls were. Snap rolls are fast and controllable, but not blinding. Spins, inverted and right side up are on the slower side and quite graceful.



Depending on power setting and stick locations, gyrations can get rather exhilarating.

I slowed things down and experimented with some high-alpha 3D. I have to admit that I'm a little rusty after the ridiculous winter we just endured. I slowed the Addiction XL down and kept adding elevator until the correct attitude was achieved for a gorgeous harrier. With the breeze running down the runway, Harrier passes were at what seemed to be a snail's pace. Transition to hover is effortless with a blip of up elevator and application of throttle. Even though I was working the rust out, I was very confident in high-alpha and hovering on the deck as if it were a foamy. The controls are super effective and power system couldn't be more perfectly matched for this plane. It's light, nimble and a pure delight!

Coming in for landing, considering the steady breeze, had me bringing it in with a little power. There is so much drag with the huge cowl and vortex generators, the plane all but stops when cutting power. The landing gear is on the stiff side, so I tried to land as gently as possible. Since the Addiction harriers so well, bringing it in with a slightly nose up attitude and power worked best for me. Drag it in until the tail touches and slowly remove power. Expect a ridiculously short roll out.



Precision Aerobatics's motor box is a work of art.

SPECS

- WINGSPAN:** 59 in.
- WING AREA:** 1,055 sq. in.
- WEIGHT:** 4.58 lbs.
- WING LOADING:** 10.02 oz./sq. ft.
- CUBE LOADING:** 3.7
- LENGTH:** 62.4 in.
- RADIO:** 4 channels required; flown with a JR 12x transmitter, Spektrum 6110E 6 channel receiver, (4) Hitec HS5245MG servos for all flight controls.
- MOTOR:** Thrust 50 brushless outrunner motor, VOX 15x8 prop, Qunatum 70-amp brushless speed control with BEC
- PROPELLER/SPINNER:** VOX 15x8 prop, 2.17 in carbon fiber spinner
- RPM:** 8,500
- BATTERY:** Two Precision Aerobatics 3S 2200mAh LiPo batteries connected in series (or single 6S 2200mAh)

of rudder post is removed (save the piece for reinstallation). The carbon landing gear screws into a carbon reinforced plate with machine screws. Loctite the mounting screw threads before installation. The wheels and pants assemble using traditional methods. A nice feature with the wheel pants is that they have a recess and mount firmly to the gear leg. The wire tail wheel fits into a drilled hole and slot at the base of the rudder. I added a zip tie to the tail wheel installation for a more secure installation. The two-piece wing features a carbon fiber main spar and dual alignment dowels with a plastic thumbscrew to lock it in place. The canopy hatch is secured with three dowel pins and three mega rare earth magnets. The laser-cut motor box needs additional fiberglass tape and carbon reinforcements prior to installation which are both supplied. The motor



The huge control surfaces on the tail give the Addiction XL its awesome 3D capabilities. Also, you can see the high quality construction through the covering.



The carbon fiber side-force generators and vortex generators aid in high-alpha and knife-edge flight.

box is fitted with the firewall and carbon rods to lock it in place. Epoxy fillets are added to maximize strength. The Thrust 50 motor fits directly to the backside of carbon reinforced mounting plate. Plastic air scoops need trimming prior to installation and force cooling air directly on the motor.

The Quantum Pro 70 amp speed control got zip-tied to the side of the motor box. The cowl requires the mounting screw locations to be drilled and then installed with wood screws. A little Dremel toolwork is required to make recesses around the landing gear legs. I finished off the motor installation with a VOX 15x8 wooden prop





A look at Precision Aerobatics's FiberFusion construction.

and a Precision Aerobatics 2.17-inch carbon fiber spinner. I did need to enlarge the cutouts



Two 3-cell 2200mAh LiPo battery packs are used to power the Addiction XL. This is a great setup because many modelers, like myself, use 2200mAh batteries in other models so it is nice not needing custom packs.

in the cone for the propeller blades.

I used my JR 12X, Spektrum 6110e receiver and Hitec HS-5245MG servos on all flight controls. The elevator and aileron servos mount close to their respective control surfaces using carbon fiber push rods. The rudder servo is mounted under the motor and uses a pull-pull

system with Kevlar cord. Enlarging of the servo pockets was required with a Dremel tool prior to installation. The iPAs come with thin servo wire that can splice in the servo lead, which is lighter than using extension leads. Carbon fiber control horns fit neatly into precut slots on each control surface that are locked in using slow-cure epoxy. Precision Aerobatics carbon fiber servo arms were fitted to the Hitec arms, and are the correct dimension to work with the carbon control surface horns. Carbon fiber push rods on elevator and ailerons have a machined aluminum devis for the control surface and a ball link for the servo end and are not adjustable. The rudder is a pull-pull system that uses Kevlar line with cable length adjustment at the servo arm.

We Used

TRANSMITTER
JR 12X



RECEIVER
SPEKTRUM AR6110E



BATTERY
TWO PRECISION AEROBATICS V2 2200mAh, 20-40C LIPO BATTERIES CONNECTED IN SERIES



MOTOR
THRUST 50 BRUSHLESS



SERVOS
HITEC HS5245MG



ESC
QUANTUM 70 AMP WITH BEC



PROPELLER
VOX 15X8



SPINNER
PRECISION AEROBATICS 2.17 in.



THE LAST WORD

The Addiction XL is a lot more plane than I expected it to be. I had a hunch that it would 3D like the dickens, but I am delighted that it does a lot more. It has a light, well-balanced feel that is totally predictable. A predictable plane inspires confidence, making it fun to fly and is vital when learning a new trick thus making it a perfect 3D trainer. Besides the awesome flight characteristics, the Addiction XL looks great and is rigid and lighter than most. Precision Aerobatics takes the guesswork out of choosing accessories and got it right! Be careful of the vortex generators when ground handling and consider buying wing bags to protect them. I'm looking forward to getting more time on my Addiction XL. 🌀

CONTACTS

- ADDICTION 3D** addiction3d.com
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- PRECISION AEROBATICS** precisionaerobatics.com
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For more information, please see our source guide on page 105.