

GREAT OUT-OF-THE-BOX PERFORMANCE FOR BEGINNERS OR 3D EXPERTS



Heli-Max AXE

I particularly enjoy micro electric helicopters for many reasons. They can be flown in smaller areas and are generally easier to work on and repair, and probably the biggest reason is the cost aspect of the hobby. Let's face it, not all of us have thousands of dollars to spend on a .90-size glow-engine heli, even though we want to.

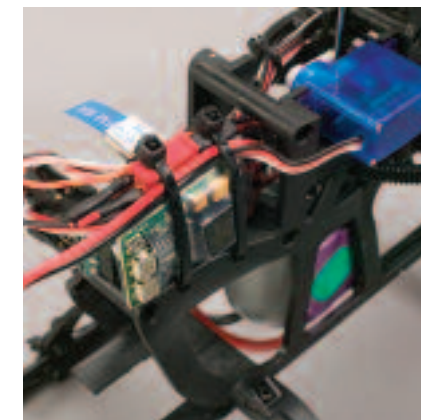
Enter the Heli-Max Axe CP. With a street price of around \$200, the Axe CP (collective pitch) is an excellent intermediate electric heli that will blow your socks off with its 3D capabilities. With many features that are typically found on more expensive models, this heli is the perfect choice for those who are looking to advance their skills from a coaxial type helicopter or fixed pitch and fly a collective pitch helicopter. This is not reserved for beginners; as a matter of fact, it can be the perfect way for more advanced fliers to hone their skills in the backyard without the worry of annoying the neighbors with a loud nitro model. Everything you need to get up into the air is included; you will find the Axe CP already built (and tested at the factory), a 9-cell light battery, a transmitter and training gear. I really enjoyed the DVD that helps newcomers set up their helicopter. Some people may not have an experienced hand nearby and would learn better by seeing these set-up steps done (such as tightening the main blades, basic controls) than reading about it in a manual.

UNIQUE FEATURES

When you open the box, you will notice the Axe CP comes fully assembled and ready to go. Plug in the AC charger and attach the blades, and this model is ready for takeoff. I checked the balance of the blades, and they were very close to being perfectly balanced; I used the included tracking strips to achieve a

perfect balance. Little else needs to be done before flight; check to be sure screws are tight and wait for the battery to charge. It took over 2 hours to charge the battery the first time (the manual stated 1 hour to charge the battery). This was not a big deal, and if had I wanted a faster charge time, I could have used an aftermarket charger capable of charging a 9-cell battery.

A good feature of the battery is that it is fitted with micro Deans plugs. You can then make an adapter if you want to use a charger you have at home to charge the 650mAh NiMH battery. The main rotor motor is a very capable 380 size. I'll admit I haven't flown with a brushed motor in quite a while, and this motor seemed to have plenty of power and punch. The tail is driven by a N60-



The gyro, ESC and motor mixing function is accomplished with one lightweight unit.



The composite 120 degree CCPM swashplate is very rigid and robust for better control.

size motor, which happens to be larger than comparatively priced models. Heat sinks are included and installed on both the tail and main rotor motors. The good thing about having a tail motor is that a bend in the boom will not result in an expensive repair bill as it might with a shaft-driven system. Symmetrical blades are included, so the Axe CP is a fully functional 3D performer right out of the box. Similar models require you to purchase these "upgrades."

The included transmitter is what you would expect from an RTF. It is nice that



SPECIFICATIONS

- MODEL** Axe CP EP ARF
- MANUFACTURER** Heli-Max
- DISTRIBUTOR** Great Planes
- ROTOR SPAN** 20.75 in. (528 mm)
- HEIGHT** 8.125 in. (206 mm)
- LENGTH** 23 in. (584mm)
- WEIGHT** 16.5 in (468mm)
- PRICE** \$200

SCOREBOARD

- 👉 Amazing value
- 👉 Completely ready to fly
- 👉 Beginner-friendly, yet 3D capable
- 👉 LiPo-compatible without needing a new ESC

the throttle/collective stick does not have the ratcheting motion found in some other models' transmitters. Basic reversing functions and trims can be changed, but the pitch is not adjustable. The transmitter has the ability to connect to another as a buddy box system to aid a newer pilot in learning how to fly.

Once the model was fully assembled, I noticed how sharp it looked, particularly the purple-anodized aluminum tail boom. Many aluminum upgrades are offered in the same color scheme, and you can fully customize your Axe CP with these components. Replacement parts are readily available online, so you will not be waiting weeks to receive them.

CONCLUSION

The Axe CP is ready to fly in the time the battery takes to charge. This is great as I was anxious to go out and test it since it was a calm day. Anyone can set up this model with the included instructional DVD and very thorough manual. If you have to stock up on replacement parts, order some blade grips, which tend to be the weak link on an otherwise durable model. For the price, Heli-Max's Axe CP can't be beat. ☺

See the Source Guide for manufacturers' contact information.



The N-60 Heavy Duty tail motor is larger than the N-30 found on most helis.

IN THE AIR



GEAR INCLUDED

RADIO SYSTEM 5-channel FM radio system; FM micro receiver; ESC/gyro/mixer unit

MOTOR 380-size main motor; N60 tail motor

BATTERY 10.8V 650mAh NiMH

The Axe CP should be flown on a relatively calm day. Anything over 10mph winds will be a handful to control the model. The included NiMH battery provides plenty of punch; however, a LiPo upgrade would provide higher voltage and performance. Takeoffs are easy; just be sure to exit the rotor wash quickly to avoid unexpected handling characteristics.

STABILITY The Axe CP exhibits surprisingly stable hovering characteristics for its size. It hovers like a larger-size electric heli. The pitch is sensitive, which is probably due to a lower head speed with the brushed motor. My model did not need much trimming, owing to the fact that each model is test-flown in the factory.

FORWARD FLIGHT The Axe CP is fully capable of forward flight at a moderate pace. The gyro seems to keep up during such maneuvers, but sudden pitch changes result in the tail slightly moving from one side or another. Circuits and figure-8s are very easy to do and act as the perfect learning tool for entering and exiting forward flight.

AEROBATICS Flip the idle-up switch on the transmitter, and you will notice that the head speed increases. This initially results in a more stable flight performance. The Axe CP can perform moderate 3D aerobatics, but don't expect it do everything a higher-priced model will perform. The LiPo battery upgrade will help, but the lack of a brushless motor upgrade somewhat limits what the Axe CP can do. But remember, the Axe CP is not designed to be an all-out 3D monster: I like it for its docile characteristics.

PILOT DEBRIEFING The tail tends to drift over the course of the battery and this is due to the tail motor receiving slightly different voltages throughout the flight. I find this happens to most helis with a motor-driven tail and is easily compensated for. The battery provides about 6 or 7 minutes of flight time, and I'll be ordering a second battery so I don't have to wait for it to charge. The composite 120-degree swashplate is very strong and robust, which contributes to the Axe's excellent flight characteristics. I enjoy taking the Axe CP out and practicing my hover orientation, and then, when the wind is good, I can pack it up and take it to the flying field.