

DiamondHobby XROC-250

This complete racer will get you in the air quickly

BY JOHN REID PHOTOS BY BOB SUTTON

DiamondHobby just introduced this excellent first product into the world of first-person-view (FPV) racing. I think the ads for this quad should read, "Just add FPV goggles and you're off to the races!" This quad's metal and plastic body is already assembled and ready for your first flight right out of the box.

HIGHLIGHTS

The XROC-250 comes in a nice metal carrying case that has the quad, transmitter, battery, and battery charger in it. The quad is completely assembled with the exception of the prop, which just needs to be mounted into the proper motors. The two-page instruction manual guides even the novice through all the necessary steps to complete the bird so that you can start flying. Fortunately, there are very few steps needed because of the high level of completion already done by the manufacturer.

Unlike many racing quads, this one does not require any soldering or other type of extra parts, such as an FPV camera, video transmitter, flight controller, or speed controls, because they are all installed in the vehicle and ready to go. I put the battery pack on the included charger first thing, as per the instructions. I then added the control's stick tops, which screw on and are adjustable so that you can set them to a height that feels comfortable. The XROC-250 is preset to the radio on Model 1, which is FlySky01, but it was easy to rename it to XROC-250. Once the battery reached full charge, I plugged it in and started working the motors, without the props, to make sure that they were all turning in the correct direction. I also checked to see which motors sped up when I moved the sticks, again double-checking to make sure that everything was going in the right direction. The instructions give very clear details as to which props go on which motors, and after I installed them, my bird was ready to fly.



SPECIFICATIONS

Name: XROC-250
Manufacturer: RocHobby
 (rochobby.com)
Distributor: DiamondHobby
 (diamondhobby.com)
Type: FPV racer
Size: 250mm
Weight: 14.39 oz.
Motors: 2204 Kv2300 (included)
Battery: 11.1v 1300mAh (included)
Speed controls: 12A (included)
Flight controller: CC3D (included)
Radio: FlySky i6 (included)
Price: \$379.99

WE LIKE

- + Complete, ready to go
- + Solid, can take a hit
- + Easy-to-upgrade controller
- + Stable and easy to fly

FPV EQUIPMENT

Once you have mastered quad flying, the next step with this little racer is to start flying FPV. The XROC-250 already comes with all the installed onboard equipment needed for FPV racing, but you will have to buy a set of goggles or some type of monitor screen. Most pilots go with the goggle setup to get the feeling of total immersion.

The first thing you have to understand is that when the quad is flying, it is sending out a transmission on one of the video channels (mine was on channel 2 with the Fat Shark goggles). This means that if you power up your quad and others are flying on that same channel, your quad's video signal will interfere with their video signal and cause them to lose the picture in their headset. This is why it is important to know which channel everyone is on so that people with the same video channel don't fly together. If your video transmitter is easy to access, you can change it and then change the channel on the goggles to match. Flying with goggles does take some practice, but you can begin by just learning what things look like from the air. Perhaps the hardest thing to learn is hovering in one spot and how close the ground really is; that's because it appears much farther away when looking through a wide-angle lens. After a bit of flying, you will get acclimated to it and then you will be hooked.



Once the goggles are on, the pilot is completely immersed in the FPV experience and views his world only through the camera that is mounted on the front of the quad.



The rear light bar can be customized and lets the quads running behind you know just where you are.

AERIAL RECAP

The XROC-250 has a CC3D flight controller board installed, which makes the quad a very stable flier. The initial settings are set to make it easy for a newcomer to adapt to the flying characteristics of a racing quad copter. I would recommend that you fly in this mode until you feel comfortable with the performance characteristics of this quadcopter. It didn't take long for me to get a handle on the flying personality of the XROC-250. Before my second flying session, I went to openpilot.org and downloaded the program for changing the setup on the CC3D flight controller board. This allows me to set up different flight modes and increase or decrease control reactions from both the transmitter sticks. After I had dialed in my controls to my flying style, I have to say that this was a fun little quad to race around.

Part of my "flying style" includes full-speed, less-than-perfect landings (some call them cartwheels!) to test out the racer's durability, and I can tell you, with the exception of a few broken props, that this quad can take a beating! This, of course, is something you need in any type of racing quad.



Left: The solid-metal chassis on both the top and bottom gives this quad enhanced protection from hits and bumps, and it has a great look to it.

Below left: The 3-blade props and powerful motors give this bird some wings and speed.

Below right: A nice design is having this power plug attached to the body, making an easy and solid electrical connection.



BOTTOM LINE

Requiring little to no time to assemble and with the durability to make it through the rough landings, this little quad will meet any racer's requirements. If you are looking for an easy way to get into FPV racing with everything in one box, then this is a great multirotor that can grow with your flying skills. ✨