GEPRC Vapor-D5 O4 Pro

GEPRC Vapor-D5 HD O4 Pro FPV Drone (PNP with GPS) User Manual

Model: Vapor-D5 O4 Pro

1. Introduction

This manual provides essential instructions for the safe and effective operation, setup, and maintenance of your GEPRC Vapor-D5 HD O4 Pro FPV Drone (PNP with GPS). Please read this manual thoroughly before your first flight to ensure proper usage and to maximize your flight experience. Retain this manual for future reference.

2. Product Overview

The GEPRC Vapor-D5 HD O4 Pro is a high-performance FPV drone designed for advanced flight capabilities and high-definition video capture. Key features include:

- **O4 Air Unit Pro:** Features a powerful CMOS sensor for improved image clarity and enhanced light sensitivity.
- **CNC Aluminum Lens Housing:** Provides a durable and robust design for the camera.
- **GEPRC SPEEDX2 E-series Motors:** Delivers smooth and powerful performance.
- **Front Lip Design:** Offers extra lens protection for the camera during flight.
- **Wider 5mm Carbon Fiber Arms:** Increases durability and contributes to a sleek build.

2.1 Drone Components

Figure 1: GEPRC Vapor-D5 HD O4 Pro FPV Drone. This image shows the drone from a front-right perspective, highlighting the propellers, motors, camera, and main frame structure.

Figure 2: Top view of the drone. This perspective illustrates the central frame, battery strap area, and the arrangement of the four propellers.

Figure 3: Rear-left view of the drone. This image highlights the GPS module and various antennas located at the rear of the aircraft.

Figure 4: Front view of the drone. This image focuses on the camera assembly and the protective front lip design.

Figure 5: Side view of the drone. This profile shot showcases the overall structure and the thickness of the carbon fiber arms.

Figure 6: Bottom view of the drone. This image displays the motor mounts and the propeller attachment points.

3. Specifications

Model	Vapor-D5 O4 Pro
Frame	GEP-Vapor-D5 O4 Pro frame
Wheelbase	230 mm
Arm Thickness	5.0 mm
Flight Controller (FC)	GEP-F722-HD v2 (MCU: STM32F722, Gyro: ICM42688-P, Barometer: YES, OSD: Betaflight OSD w/AT7456E)
ESC	TAKER H60_BLS 60A 4IN1 ESC
VTX	O4 Air Unit Pro
Camera	O4 Pro Camera
Antenna	O4 Pro original antenna
Connector	XT60
Optional GPS	GEP-M10 GPS
Motors	GEPRC SPEEDX2 2207E 1960 KV

Propeller	GEMFAN 5136
Weight (PNP Version)	428 g ±5g
Recommended Battery	6S LiPo 1300mAh – 1800mAh
Flight Time	14-19 min
Video Capture Resolution	4K

4. Setup

4.1 Unboxing and Initial Inspection

Carefully remove all components from the packaging. Inspect the drone for any visible damage that may have occurred during shipping. Ensure all included accessories are present:

- 1 x Vapor-D5 O4 Pro Drone
- 2 x GEMFAN 5136 Propellers (sets)
- 2 x Battery anti-slip pads
- 1 x Spare screw pack (includes M3*10mm, M3*8mm, M3*6mm, M5*28mm screws, M5 flange nut, M3 rivet nuts)
- 1 x Vapor side panel
- 2 x M20*250mm battery straps
- 1 x L-shaped screwdriver 1.5mm
- 1 x L-shaped screwdriver 2.0mm
- 1 x GoPro mount

4.2 Propeller Installation

1. Ensure the drone is powered off and the battery is disconnected.
2. Identify the correct rotation direction for each propeller (CW and CCW). Propellers are typically marked.
3. Align the propeller with the motor shaft and press down firmly. Secure with the provided nuts or screws, ensuring they are tightened sufficiently but not overtightened.
4. Verify that all propellers spin freely without obstruction.

4.3 Battery Connection

The drone uses an XT60 connector. Connect a fully charged 6S LiPo battery (1300mAh – 1800mAh recommended) to the XT60 connector on the drone. Ensure the battery is securely fastened using the provided battery straps and anti-slip pads.

4.4 Receiver Binding (PNP Version)

As a Plug-and-Play (PNP) version, this drone does not include a receiver. You will need to install and bind your preferred receiver (e.g., ELRS 2.4G, TBS Nano RX) according to its specific instructions. Once installed, configure the receiver in Betaflight.

4.5 GPS Module (GEP-M10 GPS)

If your drone includes the optional GEP-M10 GPS module, ensure it is securely mounted and connected to the flight controller. GPS functionality will need to be enabled and configured within the Betaflight software for features like GPS Rescue.

4.6 Betaflight Configuration

Connect the drone to a computer via USB. Use the Betaflight Configurator software to:

- Verify flight controller settings.
- Calibrate accelerometers and gyroscopes.
- Configure receiver protocols and channels.
- Set up flight modes (e.g., Acro, Angle, Horizon, GPS Rescue).
- Adjust PID tuning if necessary (advanced users).
- Ensure OSD (On-Screen Display) elements are configured for critical flight data.

5. Operating Instructions

5.1 Pre-Flight Checks

Before each flight, perform the following checks:

- Ensure the battery is fully charged and securely attached.
- Check all propellers for damage (cracks, bends) and ensure they are securely fastened.
- Verify that all wires and connectors are secure and not interfering with propellers.
- Confirm your remote controller is powered on and bound to the drone.
- Check the flight area for obstacles, people, or other aircraft.
- For GPS-enabled flights, wait for a sufficient number of GPS satellites to be acquired before arming.

5.2 Arming and Disarming

Arming the drone starts the motors, allowing for flight. Disarming stops them.

- **Arming:** Typically performed by moving the throttle stick to the lowest position and the yaw stick to the far right (or left, depending on configuration) for a few seconds. Confirm motor spin-up.
- **Disarming:** Move the throttle stick to the lowest position and the yaw stick to the far left (or right) for a few seconds. Motors should stop. In an emergency, disarming can often be done by moving the throttle to zero and yaw to a corner.

5.3 Basic Flight Controls

Familiarize yourself with the standard FPV drone controls:

- **Throttle:** Controls altitude (up/down).
- **Roll:** Controls side-to-side movement (left/right).
- **Pitch:** Controls forward/backward movement.
- **Yaw:** Controls rotation around the vertical axis (left/right spin).

Practice in a safe, open area before attempting complex maneuvers.

5.4 Landing Procedures

Descend slowly and steadily, maintaining control. Once on the ground, disarm the drone immediately.

5.5 Video Recording (O4 Air Unit Pro)

The O4 Air Unit Pro allows for high-definition video recording. Refer to the O4 Air Unit Pro manual for detailed instructions on recording settings, storage, and file transfer. Ensure a compatible microSD card is inserted before flight.

6. Maintenance

6.1 Post-Flight Inspection

After each flight, perform a quick inspection:

- Check propellers for any damage. Replace if necessary.
- Inspect the frame for cracks or loose components.
- Ensure all screws are tight.
- Clean any dirt or debris from motors and electronics.

6.2 Cleaning

Use a soft brush or compressed air to remove dust and debris from the motors, flight controller, and camera. Avoid using liquids directly on electronic components.

6.3 Firmware Updates

Periodically check the GEPRC website for firmware updates for the flight controller (Betaflight), ESCs, and O4 Air Unit Pro. Keeping firmware updated can improve performance and add new features. Follow the manufacturer's instructions carefully when performing updates.

7. Troubleshooting

This section addresses common issues you might encounter.

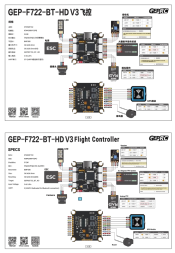
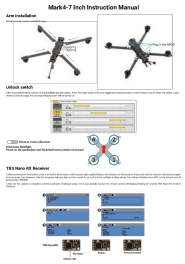
- **Drone does not arm:** Check battery connection, remote controller binding, and Betaflight arming conditions (e.g., accelerometer calibration, pre-arm switch).
- **Unstable flight/Vibrations:** Inspect propellers for damage or imbalance. Check motor screws and frame integrity. Review PID settings in Betaflight.
- **No video feed:** Ensure O4 Air Unit Pro is powered on and connected correctly. Check antenna connections. Verify goggles/monitor are on the correct channel.
- **GPS not locking:** Ensure the GPS module has a clear view of the sky. Wait longer for satellite acquisition. Check GPS configuration in Betaflight.
- **Motors not spinning evenly:** Check for debris in motors, damaged propellers, or ESC calibration issues.

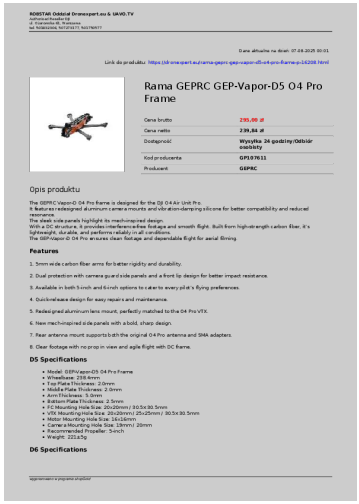
For more detailed troubleshooting, consult the Betaflight documentation or the GEPRC support resources.

8. Support

For technical assistance, setup guidance, or any product-related inquiries, GEPRC support is available. You can typically find support contact information on the official GEPRC website. Our team is ready to assist you with clear steps and solutions.

Related Documents - Vapor-D5 O4 Pro

	[GEPRC Vapor-D5 HD O4 Pro FPV Drone - High-Performance Quadcopter] Explore the GEPRC Vapor-D5 HD O4 Pro FPV Drone, designed for DJI O4 Air Unit compatibility. Features include aluminum components, shock absorption, and a powerful CMOS sensor for immersive flights. Specifications, features, and warranty information provided.
	[GEPRC MOZ7 Analog Long Range FPV Drone - Product Overview] Explore the GEPRC MOZ7 Analog Long Range FPV drone. This overview details its advanced features, robust specifications, and included components, highlighting its suitability for extended aerial photography and FPV experiences.
	[GEPRC GEP-F722-BT-HD V3 Flight Controller: Technical Specifications and Wiring Guide] Comprehensive technical specifications, wiring diagrams, and configuration details for the GEPRC GEP-F722-BT-HD V3 FPV drone flight controller, detailing connections for ESC, Camera, Receiver, DJI FPV systems, Analog FPV, GPS, and Buzzer.
	[GEPRC Mark4-7 Inch FPV Drone Instruction Manual] Comprehensive instruction manual for the GEPRC Mark4-7 Inch FPV drone, covering arm installation, receiver binding (TBS Nano RX, ELRS), VTX settings, propeller installation, and pre-flight checks.
	[GEPRC MARK5 Freestyle Quadcopter User Manual and Setup Guide] Comprehensive user manual and setup guide for the GEPRC MARK5 Freestyle Quadcopter, covering specifications, features, binding procedures for various receivers, software installation, transmitter setup, and pre-flight checks.
	[GEPRC MATEN 5.8G 2.5W VTX PRO: Specifications, Setup, and Operation Guide] Comprehensive guide to the GEPRC MATEN 5.8G 2.5W VTX PRO FPV Video Transmitter. Learn about specifications, interface definition, IRC setup, frequency tables, and adjustment methods.



Rama GEPRC GEP-Vapor-D5 O4 Pro Frame

Opis produktu

Features

D5 Specifications

D6 Specifications

[GEPRC GEP-Vapor-D5/D6 O4 Pro Frame - High-Strength Carbon Fiber Drone Frame]

Discover the GEPRC GEP-Vapor-D5 and GEP-Vapor-D6 O4 Pro frames, designed for DJI O4 Air Unit Pro. Featuring robust carbon fiber construction, vibration damping, and quick-release design for advanced drone pilots.

lang:en score:51 filesize: 118.06 K page_count: 3 document date: 2025-08-06

Dron GEPRC Vapor-D5 HD O4 Pro FPV Drone

Opis produktu

Summary

Feature

Specifications

[GEPRC Vapor-D5 HD O4 Pro FPV Drone - High-Performance Quadcopter]

Explore the GEPRC Vapor-D5 HD O4 Pro FPV Drone, designed for DJI O4 Air Unit compatibility. Features include aluminum components, shock absorption, and a powerful CMOS sensor for immersive flights. Specifications, features, and warranty information provided.

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