

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [GEPRC](#) /

› [GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter \(ELRS 2.4G\) Instruction Manual](#)

## GEPRC DarkStar22

# GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter (ELRS 2.4G) Instruction Manual

## INTRODUCTION

This manual provides essential information for the safe and efficient operation of your GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter. Please read these instructions thoroughly before first use and retain for future reference. The DarkStar22 O4 Pro is designed for cinematic-grade 4K/120fps footage with ultra-low latency, featuring a 20A AIO flight controller for precision control and a reinforced frame for durability.

## PRODUCT FEATURES

- **Cinematic-Grade Footage:** Capture 4K/120fps video with ultra-low latency for real-time responsiveness and professional quality.
- **Advanced Flight Control:** Equipped with a 20A AIO flight controller with integrated stabilization algorithms for precision control in various conditions.
- **Vibration Damping:** Engineered to minimize vibrations and maintain camera stability during dynamic movements.
- **Durable Design:** Features a reinforced frame with a shockproof canopy and prop guards for enhanced durability in indoor and outdoor flights.
- **User-Friendly Assembly:** Simplified assembly with only 4 screws and intuitive LED controls for quick customization.

## PACKAGE CONTENTS

Verify all items are present in your package:

- 1 × DarkStar22 Drone
- 1 × Prop Guard
- 1 × Top Plate
- 1 × Camera Cover
- 1 × Battery Pad
- 2 × Propellers (pairs)

- 1 × 10\*120mm Battery Strap
- 1 × L-shaped Hex Wrench 1.5mm
- 1 × Battery Anti-slip Pad
- 1 × Damping Ball Punch Tool
- 1 × Binding Pin
- 1 × USB Adapter Board
- 1 × 5P Terminal Cable
- Spare Screw Pack (2 × Damping Balls, 4 × M2\*4 Round-head Screws, 4 × M2\*7 Round-head Screws, 4 × M2\*6 Countersunk Screws, 4 × M2\*5 Countersunk Screws, 4 × M2\*6 Round-head Screws, 4 × M2\*7 Countersunk Self-Tapping Screw)

## SETUP

---

### Binding Radio and Quadcopter

To establish communication between your radio transmitter and the DarkStar22 quadcopter, follow the binding procedure. Ensure both devices are powered off before starting.

**Video:** Aquila16 Brushless Drone User Tips. This video demonstrates the binding process for a similar drone model, which can be applied to the DarkStar22.

### Battery Installation

Proper battery installation is crucial for safe operation. Always ensure the battery is securely fastened.

**Video:** Aquila16 Brushless Drone User Tips. This video includes a demonstration of battery installation for a similar drone model.

### O4 Air Unit Pro Camera and VTX Installation

The DarkStar22 features an integrated O4 Air Unit Pro. If re-assembly or maintenance is required, refer to the following videos for guidance on installing the O4 camera and VTX module. While these videos may feature different drone models, the O4 Air Unit installation steps are generally applicable.

**Video:** Meteor65 Pro/ Meteor75 Pro Brushless Drone Installation. This video demonstrates the installation of the DJI O4 Air Unit, which is relevant for the DarkStar22.

**Video:** Pavo Femto Quadcopter Installation. This video also shows the installation process for the DJI O4 Air Unit.

## OPERATING INSTRUCTIONS

---

Before each flight, ensure the battery is fully charged and securely installed. Perform a pre-flight check of all propellers, motors, and the frame for any damage. Always operate the quadcopter in an open area, away from people, animals, and obstacles. Familiarize yourself with the flight controller's functions and emergency procedures.

### Basic Flight Controls

- **Throttle:** Controls altitude. Increase to ascend, decrease to descend.
- **Yaw:** Rotates the quadcopter left or right on its vertical axis.
- **Pitch:** Tilts the quadcopter forward or backward.
- **Roll:** Tilts the quadcopter left or right.

Start with slow, controlled movements to get accustomed to the controls. Practice hovering and gentle

maneuvers before attempting more advanced flights.

## MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your DarkStar22. After each flight, inspect the propellers for cracks or chips and replace them if damaged. Check the motor mounts and frame for any loose screws or structural integrity issues. Keep the camera lens clean and free from dust or debris. Store the quadcopter and batteries in a cool, dry place.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Quadcopter does not power on	Battery not charged or improperly installed	Charge battery fully. Ensure battery is correctly inserted and clicked into place.
Loss of control/unresponsive	Binding issue or signal interference	Re-bind the radio and quadcopter. Move to an area with less interference.
Unstable flight/vibrations	Damaged propellers or loose components	Inspect and replace damaged propellers. Check all screws and connections for tightness.
Poor video quality	Dirty camera lens or VTX interference	Clean the camera lens. Ensure VTX antenna is properly connected and not obstructed.

## SPECIFICATIONS

Feature	Detail
Model	DarkStar22 O4 Pro
Frame	GEP-DS22
Main Carbon Plate Thickness	2.5mm
Wheelbase	100mm
FC System	TAKER F405 20A ELRS2.4 2-4S AIO
MCU	STM32F405
Gyro	ICM42688-P
FC Firmware	GEPRC_TAKER_F405 AIO
Flash	16MB
ESC	8Bit 20A
Motor	SPEEDX2 1104 7500KV
Propellers	HQProp 2219-3

Feature	Detail
Power Connector	XT30U-M
VTX	O4 Air Unit Pro
Camera	O4 Air Unit Pro camera module
Antenna	O4 Air Unit Pro antenna
Receiver	PNP (O4 Pro built-in RX) / ELRS 2.4G
Weight (ELRS 2.4G version)	126.8g
Recommended Battery	GEPRC Storm LiHV 3S 720mAh
Flight Time	6min45s (tested under smooth cruising; actual flight time depends on flight style)
Product Dimensions	5.47"L x 5.71"W x 2.61"H
Item Weight	127 Grams
Manufacturer	GEPRC

## PRODUCT OVERVIEW



Top-down view of the GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter, highlighting its compact design and propeller guards.



Angled front view of the GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter, showing the camera module and front propellers.



Front view of the GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter, emphasizing the protective frame and camera placement.



Angled rear view of the GEPRC DarkStar22 O4 Pro CineWhoop Quadcopter, showing the rear propellers and overall compact structure.

## WARRANTY AND SUPPORT

---

GEPRC products are covered by a limited warranty against manufacturing defects. For detailed warranty information, technical support, or service inquiries, please visit the official GEPRC website or contact their customer service. Keep your proof of purchase for warranty claims.