

HGLRC Rekon7 LR Pro Frame

HGLRC Rekon7 Long Range PRO HD O3 Frame Kit User Manual

Model: Rekon7 LR Pro Frame | Brand: HGLRC

1. INTRODUCTION

This manual provides detailed instructions for the assembly, setup, and maintenance of your HGLRC Rekon7 Long Range PRO HD O3 Frame Kit. This frame is designed for 7-inch FPV racing drones, offering durability and compatibility for extended flight times.

Safety Warning: Always ensure all components are securely fastened before flight. Incorrect assembly or loose parts can lead to equipment damage or injury. Disconnect power before performing any maintenance or assembly.

2. PACKAGE CONTENTS

Verify that all the following components are included in your package:

- 1x 2mm top plate
- 1x 2mm base plate
- 1x 2mm mid plate
- 2x 6mm front arm
- 2x 6mm rear arm
- 2x 2mm rack protection board
- 2x 2mm camera side panel
- 2x 4mm Arm Reinforcement rod
- 2x M3*28mm black mesh aluminum column
- 4x M3*20mm black mesh aluminum column
- 2x M3*18mm black mesh aluminum pillar
- 4x M4*12 Screws
- 4x M3*20 Screws
- 4x M3*16 Screws
- 4x M3*10 Screws
- 8x M3*8 Screws
- 4x M2*20 Screws
- 1x M2*16 Screws

- 1x M2*10 Screws
- 2x M2*4 Screws
- 1x M5 lock nut (red)
- 4x M3 self-locking nuts
- 5x M2 self-locking nuts
- 8x M3*8 shock-absorption balls
- 4x M2*4 shock-absorption balls
- 2x battery straps 20x250mm
- 1x Battery Anti-slip pad
- 1x TPU black GoPro holder mount
- 1x TPU black GPS mount
- 1x TPU black antenna mount
- 1x TPU black T-antenna mount
- 1x TPU black buzzer mount
- 1x TPU black DJI Air unit Block A
- 1x TPU black DJI Air unit Block B
- 1x TPU black DJI O3 holder mount
- 1x TPU black Camera converting seat

3. ASSEMBLY INSTRUCTIONS

Follow these steps to assemble your Rekon7 LR Pro Frame Kit. Refer to the diagrams for visual guidance.

3.1 Base Frame Assembly

1. Attach the 6mm front and rear arms to the 2mm base plate using the appropriate M3 screws and self-locking nuts. Ensure the arms are oriented correctly.
2. Secure the 2mm rack protection boards to the arms.
3. Install the 4mm Arm Reinforcement rods for added structural integrity.



Figure 1: Overview of the assembled Rekon7 LR Pro Frame, showcasing the carbon fiber arms and central structure.

3.2 Central Stack and Camera Mount

4. Mount the 2mm mid plate onto the base plate using the M3 aluminum columns.

5. Attach the 2mm camera side panels to the front of the frame. These panels support 19x19mm or 20x20mm cameras.



Figure 2: Front view of the frame, highlighting the camera mounting area and central stack.

3.3 Top Plate and TPU Mounts

6. Install the 2mm top plate, securing it with the remaining M3 aluminum columns. The space between the top and middle plate is 20mm.
7. Attach the various TPU mounts as needed: GoPro holder, GPS mount, antenna mounts (T-antenna, general antenna), buzzer mount, DJI Air unit blocks, and DJI O3 holder mount.



Figure 3: Side view of the frame, showing the layered plate design and mounting points for electronics.

4. COMPONENT INSTALLATION

This frame is designed for compatibility with various FPV drone components. Below are general guidelines for installing recommended parts.

4.1 Flight Controller (FC) and Electronic Speed Controller (ESC)

- The frame supports 20x20mm flight controller mounting holes.
- Mount your FC and ESC stack securely in the central section. Ensure proper isolation from the carbon fiber frame to prevent short circuits.
- Recommended FC: Zeus F722. Recommended ESC: Zeus 48-60A.

4.2 Motors

- The motor mounting holes are 16x16mm or 19x19mm.
- Attach your motors to the arms using the provided M3 screws. Ensure motor wires are routed safely and secured.
- Recommended Motor: 2806.5.

4.3 Camera and Video Transmitter (VTX)

- The frame supports 19x19mm or 20x20mm cameras. Mount the camera between the camera side panels.
- Utilize the TPU DJI Air unit blocks and DJI O3 holder mount for digital FPV systems.
- Recommended Camera: 19x19mm/20x20mm compatible.

4.4 Propellers and Battery

- Install 7-inch propellers onto your motors. Ensure correct rotation direction.
- Secure your battery to the top plate using the provided battery straps and anti-slip pad. The frame is designed to accommodate larger batteries for extended flight times.
- Recommended Propeller: 7 inches. Recommended Battery: 6S 1800-4200mAh.

5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your drone frame.

- **Inspect Screws:** Periodically check all screws and nuts for tightness. Vibrations during flight can cause hardware to loosen.
- **Carbon Fiber Inspection:** Examine carbon fiber plates and arms for cracks or delamination, especially after hard landings. Replace damaged parts immediately.
- **TPU Parts:** Check TPU mounts for wear or damage. These parts are crucial for securing sensitive electronics.
- **Cleanliness:** Keep the frame free from dirt, dust, and debris, which can interfere with electronics or add unnecessary weight.

6. TROUBLESHOOTING

This section addresses common issues related to the frame assembly.

- **Vibrations:** If your drone experiences excessive vibrations, check for loose motor screws, bent arms, or damaged propellers. Ensure all frame components are tightly secured.
- **Component Fitment Issues:** Double-check that you are using the correct screws and spacers for each component. Refer to the package contents list and assembly steps.
- **Lost Model Buzzer/GPS Issues:** Ensure the TPU mounts for the M80 PRO GPS and lost model buzzer are correctly installed and the components are securely seated.
- **Signal Loss (TBS Crossfire):** Verify that the pre-drilled mounts for TBS Crossfire dual RX/antenna are utilized correctly to optimize signal reception.

7. SPECIFICATIONS

Product Name	Rekon7 LR Frame kit
Brand	HGLRC
Material	3K Carbon fiber
Type	7 inch
Wheelbase	324mm
Size	337*246mm
Top Plate Thickness	2mm
Bottom Plate Thickness	2mm
Middle Plate Thickness	2mm
Front Arm Thickness	6mm



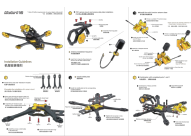
Rear Arm Thickness	6mm
Frame Protection Bar Thickness	2mm
Camera Side Plate Thickness	2mm
Top and Middle Plate Space	20mm
Flight Controller Mounting Hole	20x20mm
Camera Mount	19x19mm / 20x20mm
Motor Mounting Hole	16x16mm / 19x19mm
Item Weight	152 Grams (approx. 5.4 ounces)



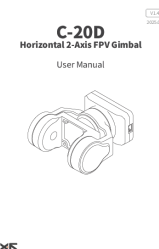
8. WARRANTY AND SUPPORT

For warranty information, please refer to the terms and conditions provided by your retailer or contact HGLRC directly. Product support and additional resources may be available on the official HGLRC website or through your purchase platform.

You can visit the official HGLRC store for more information:[HGLRC Store on Amazon](#)

Related Documents - Rekon7 LR Pro Frame

	<p>HGLRC Sector25CR Sub250g HD FPV Racing Drone Manual</p> <p>Comprehensive user manual for the HGLRC Sector25CR Sub250g HD FPV Racing Drone, covering product specifications, setup, configuration, and troubleshooting.</p>
	<p>FLYWOO Explorer LR4 Quad O3: Guida Completa e Specifiche</p> <p>Scopri il drone FLYWOO Explorer LR4 Quad O3 con unità DJI O3. Questa guida dettagliata copre specifiche, configurazione, diagrammi di cablaggio, procedure di binding del ricevitore, impostazioni della modalità, GPS rescue, funzione buzzer e aggiornamenti firmware.</p>
	<p>SpeedyBee Master 5 V2 Drone Frame Installation Guide</p> <p>Comprehensive installation guide for the SpeedyBee Master 5 V2 FPV drone frame, detailing assembly steps for the frame, camera mount, antenna base, ESC, and O3 Air Unit. Includes component placement and screw recommendations.</p>

 <p>Racewhoop30 FPV Racing Drone Manual</p> <p>www.hglrc.com</p>	<p>HGLRC Racewhoop30 FPV Racing Drone Manual</p> <p>A comprehensive user manual for the HGLRC Racewhoop30 FPV Racing Drone, detailing product specifications, interface descriptions, setup procedures, configuration, troubleshooting, and maintenance.</p>
 <p>Sector 5 V3 VTX FPV Racing Drone Manual</p> <p>www.hglrc.com</p>	<p>HGLRC Sector 5 V3 VTX FPV Racing Drone Manual</p> <p>Comprehensive user manual for the HGLRC Sector 5 V3 VTX FPV Racing Drone. Covers setup, configuration, specifications, and troubleshooting for this advanced racing drone.</p>
 <p>C-20D Horizontal 2-Axis FPV Gimbal User Manual</p> <p>XF ROBOT</p>	<p>XF ROBOT C-20D Horizontal 2-Axis FPV Gimbal User Manual</p> <p>Explore the XF ROBOT C-20D Horizontal 2-Axis FPV Gimbal with this comprehensive user manual. Learn about installation, control options, configuration, calibration, firmware updates, and supported cameras for drone applications.</p>