

Yuneec YUNH920US

Yuneec Tornado H920 Hexa-Copter User Manual

Model: YUNH920US

1. INTRODUCTION

Welcome to the user manual for the Yuneec Tornado H920 Hexa-Copter. This guide provides essential information for the safe and effective operation, maintenance, and troubleshooting of your aircraft. Please read this manual thoroughly before operating the device.

Safety Guidelines

- Always operate the Tornado H920 in an open area, away from people, animals, and obstacles.
- Maintain a clear line of sight with the aircraft at all times during flight.
- Do not fly in adverse weather conditions, including strong winds, rain, or snow.
- Ensure all batteries are fully charged and securely installed before each flight.
- Inspect propellers for damage before and after each flight. Replace any damaged propellers immediately.
- Understand and comply with all local regulations regarding drone operation.
- Keep hands and face clear of rotating propellers.

2. PRODUCT OVERVIEW

The Yuneec Tornado H920 is a professional-grade hexa-copter designed for aerial photography and videography, particularly optimized for use with the Panasonic GH4 camera (not included).

Key Features

- Optimized for Aerial Shooting with Panasonic GH4 camera (requires GB603 gimbal, sold separately).
- Constructed with a durable Carbon Fiber Frame.
- Features Retractable Landing Gear for an unobstructed 360-degree camera view.

- Includes the ST24 Transmitter with an integrated 7-inch Android device for live monitoring and telemetry.
- Equipped with fail-safe folding arms and return-to-home capabilities.
- Designed for one motor failure survivability.

Components Included in the Box

- YUNEEC Tornado H920 Hexa-Copter
- ST24 Transmitter
- 2 x Flight Batteries
- Dual-Port Charger
- Aluminum Case

Visual Reference



Figure 2.1: Front view of the Yuneec Tornado H920 Hexa-Copter with a camera and gimbal attached, showing its six propellers and retractable landing gear.



Figure 2.2: Another perspective of the Tornado H920, highlighting its carbon fiber frame and motor mounts.



Figure 2.3: The Tornado H920 with its landing gear in the retracted position, demonstrating the clear view for the camera.

3. SETUP

3.1 Unboxing and Initial Inspection

Carefully remove all components from the aluminum case. Inspect for any signs of damage during transit. Ensure all listed components are present.

3.2 Battery Charging

Connect the dual-port charger to a power source. Connect the flight batteries to the charger. The charger's indicator lights will show the charging status. Fully charge both flight batteries before first use. Charging time may vary.

3.3 Aircraft Assembly

- **Propeller Attachment:** Ensure propellers are correctly matched to their respective motors (e.g., clockwise and counter-clockwise). Securely fasten them according to the markings on the propellers and motor mounts.
- **Landing Gear:** The landing gear is retractable. Ensure it is in the deployed position for takeoff and landing.
- **Gimbal and Camera Installation:** If using a Panasonic GH4 camera with the GB603 gimbal (sold separately), follow the specific instructions provided with the gimbal for secure attachment to the aircraft.

3.4 Transmitter (ST24) Preparation

Ensure the ST24 transmitter's internal battery is charged. Power on the transmitter. The integrated 7-inch Android device will boot up. Familiarize yourself with the controls and interface before flight.

4. OPERATING INSTRUCTIONS

4.1 Pre-Flight Checklist

- Verify all batteries (aircraft and transmitter) are fully charged.
- Check propellers for damage and ensure they are securely attached.
- Confirm the landing gear is in the deployed position.
- Ensure the flight area is clear of obstacles, people, and animals.
- Check GPS signal strength on the ST24 transmitter before takeoff.
- Calibrate the compass if prompted or if flying in a new location.

4.2 Powering On/Off

- **Power On:** First, power on the ST24 transmitter. Then, power on the Tornado H920 aircraft. Wait for the aircraft and transmitter to establish a connection.
- **Power Off:** Land the aircraft safely. Power off the Tornado H920 first, then power off the ST24 transmitter.

4.3 Flight Modes

The Tornado H920 features various flight modes designed for different operational needs. Refer to the ST24 transmitter's on-screen manual for detailed descriptions and how to switch between modes. Common modes include GPS mode for stable hovering and manual mode for experienced pilots.

4.4 Basic Flight Controls

The ST24 transmitter uses standard drone control stick configurations. The left stick typically controls throttle (altitude) and yaw (rotation), while the right stick controls pitch (forward/backward) and roll (left/right). Practice in an open, safe

environment before attempting complex maneuvers.

4.5 Landing Procedures

Approach the landing zone slowly and steadily. Descend gradually, maintaining control. Once on the ground, reduce throttle completely to stop the motors. Ensure the landing gear is fully deployed before landing.

5. MAINTENANCE

5.1 Cleaning

After each flight, gently wipe down the aircraft and propellers with a soft, dry cloth to remove dust, dirt, or debris. Avoid using harsh chemicals or excessive moisture.

5.2 Propeller Inspection and Replacement

Regularly inspect all propellers for cracks, chips, bends, or any signs of wear. Damaged propellers can affect flight stability and safety. Replace them immediately with genuine Yuneec replacement parts, ensuring correct orientation.

5.3 Battery Care and Storage

- Store batteries in a cool, dry place, away from direct sunlight and extreme temperatures.
- Do not overcharge or over-discharge batteries.
- If storing for extended periods, charge batteries to approximately 50% capacity.
- Dispose of damaged or swollen batteries according to local regulations.

5.4 Firmware Updates

Periodically check the Yuneec official website for available firmware updates for both the Tornado H920 and the ST24 transmitter. Keeping your firmware updated ensures optimal performance and access to new features.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Aircraft not powering on	Low or uncharged battery; incorrect battery installation.	Ensure batteries are fully charged and correctly inserted. Check power button.
No signal from transmitter	Transmitter not powered on; aircraft not powered on; out of range; interference.	Power on both devices. Move closer to the aircraft. Avoid areas with strong electromagnetic interference.

Problem	Possible Cause	Solution
Unstable flight / Drifting	GPS signal weak; compass not calibrated; damaged propeller; strong winds.	Fly in open areas with strong GPS. Calibrate compass. Inspect and replace damaged propellers. Avoid flying in windy conditions.
Camera not recording/displaying feed	Camera not powered on; SD card full/missing; gimbal connection issue; video downlink issue.	Ensure camera is powered and connected. Check SD card. Verify gimbal connection. Check video downlink settings on ST24.
Landing gear not retracting/deploying	Obstruction; mechanical issue; control error.	Check for obstructions. Ensure correct control input on ST24. Do not force movement.

7. SPECIFICATIONS

Feature	Detail
Brand	Yuneec
Model Name	YUNEEC Tornado H920 (YUNH920US)
Color	Black
Material	Carbon Fiber
Item Weight	44.6 Pounds (approx. 20.23 kg)
Product Dimensions	22 x 20 x 20 inches (approx. 55.88 x 50.8 x 50.8 cm)
Connectivity Technology	5.8 GHz, Wi-Fi
Video Capture Resolution	1080p, 4K (dependent on camera/gimbal)
Video Capture Format	MOV, MP4 (dependent on camera/gimbal)
Supported Image Format	JPEG, RAW (e.g., DNG) (dependent on camera/gimbal)
Battery Type	Lithium Ion (included)
Control Type	Remote Control (ST24 Transmitter)
Skill Level	Intermediate" or "Advanced
First Available Date	November 5, 2015

8. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official Yuneec website. If you encounter any issues not covered in this manual or require technical assistance, please contact Yuneec customer support through their official channels.

Manufacturer: Stampede Global

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question