

## SpeedyBee Master 5

# SpeedyBee Master 5" HD Frame User Manual

Model: Master 5

## INTRODUCTION

The SpeedyBee Master 5" HD Frame is engineered for freestyle flight, offering a robust and adaptable platform for your FPV drone build. Its innovative anti-shock stack structure is designed to minimize vibrations transmitted to the flight controller's gyroscope, ensuring stable performance. The frame features a detachable camera fixing plate, allowing for extensive modification and compatibility with various camera mounting holes, which helps in avoiding vignetting.

Constructed with a honeycomb-shaped aluminum alloy CNC drone head, the frame provides superior strength and a refined aesthetic. The H-FOV 130 section design offers an expanded field of view for your FPV camera. An optional honeycomb-shaped aluminum alloy cooling module can be mounted under the VTX to enhance the operational stability of both FPV and high-power analog video transmitters.

## KEY FEATURES

- **Freestyle Optimized Design:** Specifically engineered for dynamic freestyle FPV flying.
- **Anti-Shock Stack Structure:** Innovative design to reduce vibration transfer to the flight controller's gyroscope.
- **Detachable Camera Fixing Plate:** Allows for flexible camera mounting options and modification, accommodating various camera types and reducing vignetting.
- **CNC Aluminum Alloy Drone Head:** Honeycomb-shaped design for enhanced strength and improved aesthetics.
- **H-FOV 130 Section:** Provides a wider field of view for an immersive FPV experience.
- **Optional Cooling Module Support:** Designed to integrate an optional honeycomb-shaped aluminum alloy cooling module for VTX, improving stability.

## PACKAGE CONTENTS

The SpeedyBee Master 5" HD Frame Kit includes the following components:

- 1x SpeedyBee Master 5" HD Frame Kit (unassembled components)
- Necessary hardware for assembly (screws, standoffs, etc.)

***Note: Electronics such as flight controllers, ESCs, motors, cameras, and VTX are NOT included with the frame kit and must be purchased separately.***

## SETUP AND ASSEMBLY

Assembling the SpeedyBee Master 5" HD Frame requires careful attention to detail. Please follow these general steps. For detailed diagrams and specific screw placements, refer to the official assembly guide available on the SpeedyBee website.

1. **Unpack Components:** Carefully unbox all frame components and hardware. Verify that all parts listed in the package contents are present.
2. **Prepare Arms:** Attach the carbon fiber arms to the bottom plate using the provided screws and nuts. Ensure they are securely fastened but do not overtighten.
3. **Install Standoffs:** Mount the aluminum standoffs to the bottom plate, which will support the middle and top plates.
4. **Mount Middle Plate:** Secure the middle plate onto the standoffs. This plate typically houses the flight controller stack.
5. **Install Camera Mount:** Assemble the detachable camera fixing plate and attach it to the front of the frame. Ensure it is oriented correctly for your camera's field of view.
6. **Attach Top Plate:** Secure the top plate to the remaining standoffs. This plate often provides mounting points for the battery strap and antenna.
7. **Install TPU Parts:** Attach any included TPU parts, such as arm protectors or antenna mounts, to their designated locations.
8. **Final Inspection:** Before installing electronics, perform a thorough inspection to ensure all screws are tightened, and components are correctly aligned.



Image: The SpeedyBee Master 5" HD Frame, showcasing its carbon fiber and yellow aluminum components. This image illustrates the fully assembled frame structure, ready for electronic component installation.

## OPERATION CONSIDERATIONS

The SpeedyBee Master 5" HD Frame serves as the structural foundation for your FPV drone. Its operational characteristics are primarily determined by the electronic components you choose to install, including the flight controller, ESCs, motors, and FPV system.

- **Component Compatibility:** Ensure all electronic components are compatible with the frame's mounting patterns and available space. Refer to the frame's specifications for recommended stack sizes and motor mounting patterns.
- **Weight Distribution:** Proper weight distribution is crucial for flight performance. Position your battery and other heavy components to achieve a balanced center of gravity.
- **Cable Management:** Route all wiring neatly and securely within the frame to prevent interference with propellers or moving parts, and to protect against damage during crashes.

- **Pre-Flight Checks:** Always perform thorough pre-flight checks, including propeller security, battery connection, and radio link integrity, before operating your drone.

## MAINTENANCE

Regular maintenance of your SpeedyBee Master 5" HD Frame will help ensure its longevity and continued performance.

- **Inspect for Damage:** After each flight, visually inspect the carbon fiber plates, aluminum parts, and TPU components for any cracks, bends, or signs of stress.
- **Check Screws:** Periodically check all screws and fasteners for tightness. Vibrations during flight can cause screws to loosen over time.
- **Clean Frame:** Remove any dirt, dust, or debris from the frame using a soft brush or compressed air. Avoid using harsh chemicals that could damage the materials.
- **Replace Damaged Parts:** If any part of the frame is significantly damaged, replace it immediately to prevent further issues or potential failure during flight.

## TROUBLESHOOTING

While the frame itself is a passive component, issues related to its assembly or integrity can impact your drone's performance. Here are some common troubleshooting tips:

- **Excessive Vibrations:**
  - Ensure all frame screws are tight.
  - Check for bent or cracked arms.
  - Verify that the anti-shock stack structure is correctly assembled and not damaged.
- **Camera Vignetting:**
  - Adjust the camera's position on the detachable plate.
  - Ensure the camera is compatible with the frame's H-FOV 130 section.
- **Loose Components:**
  - Regularly check and tighten all screws, especially those holding the arms and main plates.
  - Ensure standoffs are securely seated.

## SPECIFICATIONS

Brand	SpeedyBee
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Model Name	Master 5
Item Model Number	Master 5
Color	Yellow
Material	Aluminum, Carbon Fiber
Item Weight	12.2 ounces (approx. 346 grams)
Compatible Devices	Cameras (FPV, HD), Flight Controllers, ESCs, Motors
Recommended Age	10 years and up

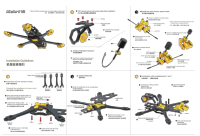
### WARRANTY AND SUPPORT

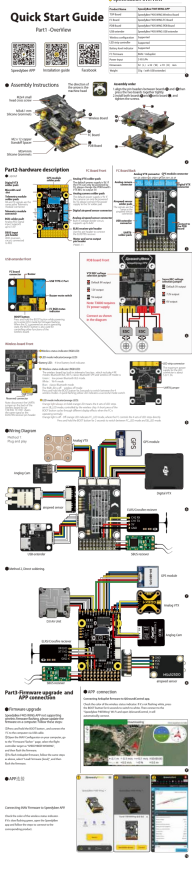
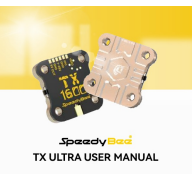
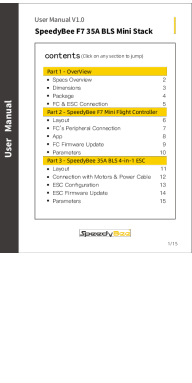
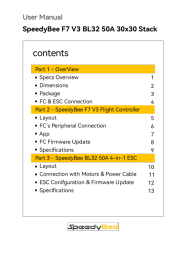
For information regarding warranty coverage, technical support, or to access additional resources such as detailed assembly diagrams or firmware updates, please visit the official SpeedyBee website or contact their customer service directly.

**Official Website:** [www.speedybee.com](http://www.speedybee.com)

Please retain your proof of purchase for any warranty claims.

### Related Documents - Master 5

	<p><a href="#">SpeedyBee Master 5 V2 Drone Frame Installation Guide</a></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>
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 <p>The cover of the 'Quick Start Guide' for the SpeedyBee F405 WING APP. It features a 'Part 1 Overview' section with a list of components and a 'Part 2 Hardware description' section with detailed diagrams of the flight controller, motor, and ESC connections. The guide is designed for fixed-wing flight controllers.</p>	<p><a href="#">SpeedyBee F405 WING APP Quick Start Guide</a></p> <p>A quick start guide for the SpeedyBee F405 WING APP, detailing hardware descriptions, assembly instructions, firmware upgrades, and app connections for fixed-wing flight controllers.</p>
 <p>The cover of the 'TX ULTRA USER MANUAL' for the SpeedyBee TX ULTRA FPV video transmitter. It shows the transmitter module and the manual's title.</p>	<p><a href="#">SpeedyBee TX ULTRA User Manual</a></p> <p>Comprehensive user manual for the SpeedyBee TX ULTRA FPV video transmitter, covering installation, operation, LED indicators, IRC TRAMP protocol support, and BetaFlight configuration.</p>
 <p>The cover of the 'User Manual V1.0' for the SpeedyBee F7 35A BLS Mini Stack. It includes a 'contents' table of contents listing sections such as 'Quick Overview', 'Package', 'ESC &amp; ESC Connection', 'ESC Firmware Update', and 'Specifications'.</p>	<p><a href="#">SpeedyBee F7 35A BLS Mini Stack User Manual V1.0</a></p> <p>Comprehensive user manual for the SpeedyBee F7 35A BLS Mini Stack, covering flight controller and ESC specifications, dimensions, package contents, connection diagrams, app usage, firmware updates, and configuration parameters.</p>
 <p>The cover of the 'User Manual' for the SpeedyBee F7 V3 BL32 50A 30x30 Stack. It includes a 'contents' table of contents listing sections such as 'Quick Overview', 'Package', 'ESC &amp; ESC Connection', 'ESC Firmware Update', and 'Specifications'.</p>	<p><a href="#">SpeedyBee F7 V3 BL32 50A 30x30 Stack User Manual</a></p> <p>Comprehensive user manual for the SpeedyBee F7 V3 BL32 50A 30x30 Stack, detailing specifications, connections, and setup for flight controllers and ESCs.</p>





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\* Note: 3D eect requirements, the actual object shall prevail CNC camera mount and camera side plate installation M3\*5 Front top plate Install the front top plate M2\*3 Camera side plate 2 Antenna Installation Sequence 1 inse the O-ring into the antenna to secure it on the TPU antenna base. ...

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Product Name	Master 5 V2				
Version	Master 5 V2 O3 PNP	Master 5 V2 O3 ELRS	Master 5 V2 O3 TBS	Master 5 V2 O3 ELRS PNP	Master 5 V2 O3 ELRS PNP
Product Type	Rotorcrafts				
Wheelbase	226mm				
Dimension	222*225mm				
number of propellers	4				
FC model	SpeedyBee F7V3				
Manufacturer	Shenzhen SpeedyBee Technology Co., Ltd.				
Bluetooth	SpeedyBee F7V3 Controller configuration, built-in a range 2.4 GHz WiFi and Bluetooth version 4.2				
Temperature	-10° ~ 40°				
Motor Model	2206S 18000~				
Weight (battery included)	420g ± 10g		410g ± 10g		
Max Takeoff Weight (including the 1S battery)	around 760g		around 770g		
Max Horizontal Flight Speed	160km/h				
Max Horizontal Flight Speed (Angle Limit 10° ~ 120°)	Angle Limit 10° ~ 120°				
Max Horizontal Flight Speed (Angle Limit 30° ~ 200°)	Angle Limit 30° ~ 200°				

[pdf] Specifications

G Master 5 V2 Specifications store fhxxhuiq8q mybigcommerce product images img SpeedyBee ||| Product Name Master5 V2 Version **Master 5 V2 O3 Master 5 V2 O3 Master 5 V2 O3 Master 5 V2 PNP ELRS TBS Analog PNP Master 5 V2 Analog ELRS Master 5 V2 Analog TBS** Product Type Rotorcrafts Wheelbase 226mm Dimension number of propellers FC model 222\*225mm 4 SpeedyBee F7V3 Manufacturer Blu...

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**Master 5 V2 ELRSPNPUART3 DFUDFU** betaight https://betaight.com/docs/wiki/guides/current/DFU-Hijacking...

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SpeedyBee Quick Start Manual: Binding, Settings, and Pre-Flight Checks

A quick start guide for SpeedyBee drones, covering ARM & Modes setup, DJI O3 Air Unit binding, Falcon binding, TX800 settings, TBS Nano RX binding, ELRS binding, and essential pre-flight checks. Includes after-sale service information.

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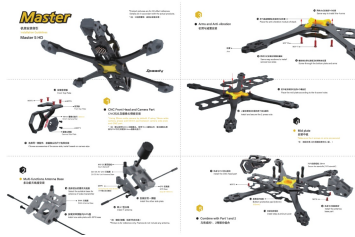
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\* 3D CNC M3\*5 M2\*3 2 1 O, TPU SMA antenna base SMA \* 1 GPS M2.5\*8 RunCam LINK 2 T M3\*23 O3 Air Unit M2.5\*8 GPS Size:18\*18\*8mm 4 1 3 \*: x2 x2 2 M3\*14 M3\*11 M3\*14 4 4 1 6 M2\*8 2 12 1 CNC 2 7075 M3\*5 3 0.5mm M2.5\*6 M3\*6 4 M3\*6 ... lang:pt score:19 filesize: 1.79 M page\_count: 12 document date: 2023-08-14



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1216Master 5HD Installation Manual SpeedyBee Master 5 HD FPV Drone Frame for DJI Air Unit O3 Inch Racing Freestyle Quad Kit with Antishock Structure Multiple Camera Mount Aluminum Heat Dissipation Module FC ESC VTX ANTENNA Toys Games A1KSC55z7VL m media amazon images I |||

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Install arms and anti vibration module Complete installation of 4 in turn stack to corresponding position

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\* Note: 3D effect requirements, the actual object shall prevail CNC camera mount and camera side plate installation M3\*5 Front top plate Install the front top plate M2\*3 Camera side plate 2 Antenna Installation Sequence 1 inse the O-ring into the antenna to secure it on the TPU antenna base. ...

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