

Meteor75 Pro P1

Brushless Whoop Quadcopter

USER MANUAL

1. Product Overview

1.1 Product List

1*Meteor75 Pro P1 Brushless Whoop Quadcopter

1*P1 Digital VTX Manual

4*GF 45mm 3-Blade Propellers

1*Type-C to SH1.0 Adapter

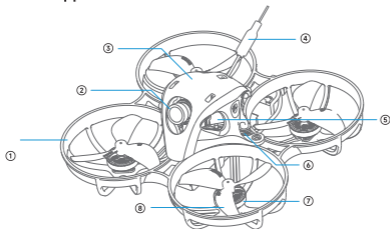
Note: Packaging contents may differ by version, please refer to the actual product.

1*SH1.0-4Pin Adapter Cable

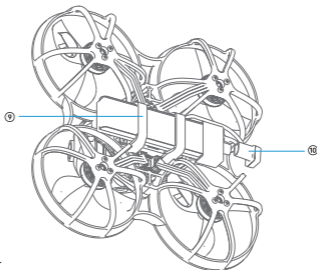
4*M1.4*4 Flat Head Screws

3*Canopy Decorative Parts

1.2 Product Appearance



- ① Frame
- ② Camera
- ③ Canopy
- ④ Antenna
- ⑤ VTX
- ⑥ Flight Controller
- ⑦ Motor
- ⑧ Propellers
- ⑨ Battery Slot
- ⑩ Power Connector



2. Disclaimer

Please read this manual and all safety precautions carefully before using this product. BETAFPV and its authorized dealers shall not be held liable for any product malfunction, personal injury, or property damage resulting from failure to comply with the guidelines stipulated in this manual.

Any damages caused by inherent quality defects in the product or its accessories shall be handled in accordance with applicable laws, regulations, and BETAFPV's official warranty policy. If you do not agree to the terms of this user guide, please do not use this product and contact your seller immediately for a return.

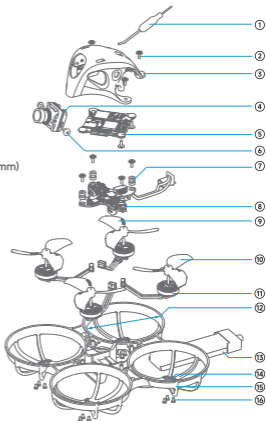
By using this product, you are deemed to have understood, acknowledged, and accepted all terms and conditions herein. Users agree to take full responsibility for their own actions and all consequences arising therefrom. Users agree to use this product only for legitimate purposes and agree to these Terms and Conditions and any relevant policies or guidelines established by BETAFPV.

This product documentation is subject to change without prior notice. Please visit <https://betafpv.com/> for the latest information.

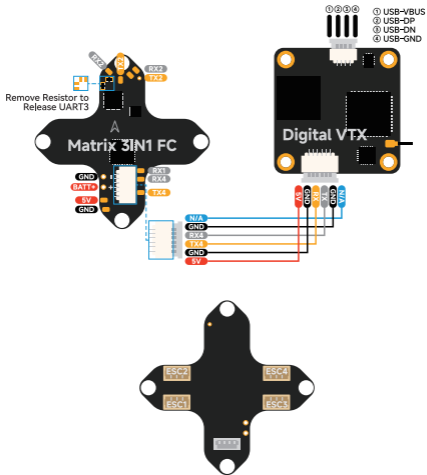
3. Assembly Guide

3.1 Assembly Diagram

- ① Antenna
- ② Self-tapping Screws|M1.4*5
- ③ Canopy
- ④ Camera
- ⑤ VTX
- ⑥ Machine Screws|M2*4
(Mounting Hole Size: 25.5*25.5mm、 \varnothing 2.5mm)
- ⑦ Rubber Grommets
- ⑧ Flight Controller|FC
(Mounting Hole Size: 25.5*25.5mm)
- ⑨ Propellers|CW
- ⑩ Propellers|CCW
- ⑪ Motor
- ⑫ Duct Inner Diameter: 47.7mm
- ⑬ Battery
- ⑭ Motor Mounting Hole Size:
3-M1.4- \varnothing 6.6mm
- ⑮ Frame (Wheelbase: 80.8mm)
- ⑯ Machine Screws|M1.4*4



3.2 Wiring Diagram



When setting up Digital VTX, Peripherals for UART4 need to be set as VTX (MSP + Displayport). For the receiver, please configure UART3 to be set as Serial Rx.

Identifier	Configuration/MSP	Serial Rx	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled 115200
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled 115200
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled 115200
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>	Disabled 115200
UART4	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	VTX (MSP + Displayport) 115200

CRSF Protocol RX

In Configuration tab, set "Serial (via UART)" as the Receiver Mode, and set "CRSF" as the Serial Receiver Provider.

Receiver

Serial (via UART)

Receiver Mode

- The UART for the receiver must be set to 'Serial Rx' (in the Ports tab)
- Select the correct data format from the drop-down, below:

CRSF

Serial Receiver Provider

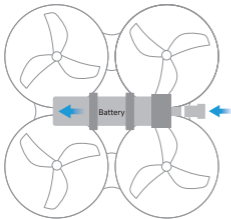
Some Receiver Providers are not supported by current Build Configuration.

* CRSF Protocol RX: TBS Nano / ELRS Series RX

4. Binding and Configuration

4.1 Battery Installation

Insert the battery into the slot at the bottom of the quadcopter and connect the power connector.



4.2 Receiver Binding (ELRS)

- Power cycle the quadcopter 3 times rapidly. The receiver LED flashes double green, indicating the drone enters the binding mode.
- Set your radio transmitter into binding mode (refer to your radio transmitter's manual for specific steps).
- The receiver LED turns solid green, indicating a successful binding.
- If binding is not successful within 8 seconds, please repeat the steps above.

Tips:

- Before binding, please ensure your radio transmitter protocol matches the Meteor75 Pro P1 and that the channels are correctly configured (refer to the "Betaflight Settings" section for details).
- Once bound, the quadcopter and radio transmitter will connect automatically upon power-up; re-binding is not required.

4.3 VTX Binding

	P1 Air Unit HD VTX	Ground Station
Step 1	When powered on, the light will show solid red	When powered on, the start-up screen appears on the display
Step 2	Short press the bind button to enter binding mode, the light will flash green quickly for around 30 seconds	Short press the bind button to enter binding mode, the buzzer will emit a 'beep... beep... beep... beep' prompt
Step 3	The indicator light turn from flashing green to solid green, indicating successful binding	The buzzer emits a long 'beep' and the video transmission feed is displayed, indicating successful binding

Tips:

- Ground Station Equipment includes FPV goggles, FPV monitors, and receiver modules that support the ArtLynk video transmission system. For detailed binding procedures, please refer to the specific manual of your device.
- If the binding fails, please repeat Step 2. If the binding fails due to VTX overheating, please power off the VTX and allow it to cool down before rebinding the devices.

4.4 Betaflight Settings

The Meteor75 Pro is pre-configured with factory settings for Channel Mapping, Switches Function, Motor Direction, and OSD. No additional modification is required for the first flight.

Channel Mapping

- **ARM:** Used to lock/unlock the motors. Factory default is AUX1. (Low position: Disarmed; High position: Armed).
- **ANGLE:** Self-level mode. Default: AUX2 (Low)
- **HORIZON:** Self-level mode. Default: AUX2 (Mid).
- **AIR MODE:** Enabled by default in the firmware; no AUX settings required.
- **BEEPER:** Trigger for the buzzer. Default: AUX4.
- **FLIP OVER AFTER CRASH:** Allows the quadcopter to flip itself over after a crash. Default: AUX3.

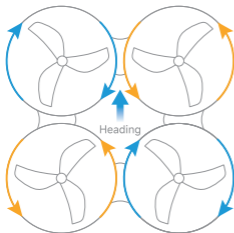
The screenshot shows five Betaflight settings for channel mapping. Each setting is displayed in a dark grey box with a dropdown menu, a range slider, and two buttons: 'Add Link' and 'Add Range'. The settings are:

- ARM:** Set to AUX1. Range slider from 1000 to 2000.
- ANGLE:** Set to AUX2. Range slider from 1000 to 1500.
- HORIZON:** Set to AUX2. Range slider from 1500 to 2000.
- BEEPER:** Set to AUX4. Range slider from 1500 to 2000.
- FLIP OVER AFTER CRASH:** Set to AUX3. Range slider from 1500 to 2000.

Note: If any settings are modified, remember to click "Save" to apply changes.

4.5 Motor Direction & Propeller Installation

The default motor direction is set to "Props in" (Inward Rotation). Please install the propellers following the diagram below.



5. Pre-flight Check

- Inspect all motors and propellers to ensure they are installed securely. Check for any looseness, deformation, or damage.
- Confirm the battery is securely seated in the slot and firmly connected to the battery connector. Ensure the quadcopter is powered on and all status LEDs are functioning normally.
- Verify that the quadcopter and all supporting electronics (radio transmitter, FPV goggles, etc.) are fully charged and that the connection/binding is stable.
- Ensure all flights comply with local laws and regulations, as well as the safety precautions and flight warnings provided by BETA FPV.

6. Service & Support



Common Troubleshooting



BETA FPV Technical Support



Quadcopter Manual

7. Safety Guidelines

7.1 Important Notices

- This product is an FPV quadcopter, classified as a multi-rotor model aircraft. It is NOT a toy and is not suitable for children under 14 years of age.
- Operating an FPV quadcopter requires basic technical knowledge and practice. Equipped with high-speed motors and sharp propellers, these quadcopters can reach high speeds and pose significant risks. Please familiarize yourself with all functions before operation. Incorrect operation may result in serious injury to yourself or others, as well as damage to the product or property.
- Do not use components not provided or recommended by BETA FPV. All installation and use must strictly follow BETA FPV guidelines. Please keep this manual for future reference as it contains essential safety, operation, and troubleshooting information.

7.2 Flight Warnings

- Do not fly in adverse conditions, such as high winds, rain, snow, thunderstorms, or heavy fog. This quadcopter is not waterproof or dustproof; avoid water exposure to prevent short circuits and electronic failure.
- Ensure the flight area is open and safe. Excessive obstacles may interfere with radio and video signals. Stay away from crowds, water, high-voltage power lines, communication base stations, and flammable/explosive materials.
- When flying visually, always keep the quadcopter within your line of sight.
- When flying with goggles, minimize obstacles between the quadcopter and the pilot. Since your surrounding awareness is limited, fly with a spotter to handle emergencies. It is highly recommended to remain seated while flying.
- Do not take off or land on non-fixed platforms, such as your palm, or moving vehicles and boats.
- Never touch spinning propellers, as they can cause severe personal injury or property damage.
- In the event of an emergency during flight, immediately disarm the motors via the transmitter.
- Operate the throttle stick gently to maintain stability and avoid sudden, erratic movements.