FPV DRONE STARTER BLUEPRINT

Manual FPV Starter: Analog Indoor Whoop

Generated July 23, 2026. Product listings, prices and availability can change. Confirm the exact variant and seller before ordering.

Open the maintained online result

Why this package fits

This is the best starting point if you want to learn traditional two-stick manual FPV indoors at the lowest practical cost. The system uses an ELRS radio, analog goggles and a small brushless whoop designed to tolerate normal beginner crashes.

> **Choose another path if polished HD video and assisted flight matter more than learning manual control at the lowest cost.**

Budget: Lowest relative complete-system cost
Environment: Mostly indoors
Video: 5.8 GHz analog
Experience: Beginner to manual practice

Package-level safety note

This is a bind-and-fly manual FPV aircraft, not a ready-to-fly stabilized camera drone. The buyer must bind ELRS, configure and verify controls, and learn manual flight. Simulator practice is strongly recommended.

Complete system purchase checklist

This is one coordinated system, not a collection of unrelated recommendations. Start with the Core System items, then add the required supporting and safety equipment before flying. Optional upgrades can wait.

Core System: Buy These First

1. Drone: BETAFPV Air65 Freestyle Brushless Whoop Quadcopter

Exact variant: Freestyle, ELRS 2.4GHz, G473 five-in-one flight controller, BT2.0

The aircraft at the center of this system.

Compatibility: 65mm, approximately 17.3g manual analog BNF whoop with the G473 five-in-one flight controller, onboard ELRS 2.4GHz receiver, C03 analog camera, adjustable 5.8GHz 25-400mW video transmitter, BT2.0 battery connector, 0702SE II 23000KV motors and HQ 31mm ultralight propellers. Use only the Freestyle version represented by ASIN B0DQPP4DR8. The selected 1S 300mAh BT2.0 batteries, ELRS RadioMaster Pocket, analog Cobra X V4 goggles and WhoopStor V3 are compatible. The aircraft does not include a radio, goggles, flight batteries or charger. Bind ELRS and verify Betaflight channel mapping, arming, flight modes and failsafe before flight.

Required | ASIN B0DQPP4DR8 | Last checked 2026-07-21

Check Price on Amazon

2. Radio: RadioMaster Pocket Radio Controller (M2)

Exact variant: Charcoal, ELRS, FCC, Mode 2

The controller used to operate this aircraft.

Compatibility: Internal ELRS 2.4GHz matches the Air65 receiver. Select Charcoal, ELRS, FCC and Mode 2. Do not select CC2500 or LBT for the U.S. package. The required two 18650 cells are not included with the radio.

Required | ASIN B0DXPLH726 | Last checked 2026-07-21

Check Price on Amazon

3. Goggles: Skyzone Cobra X V4 Analog FPV Goggles

Exact variant: Black, SteadyView diversity and H.264 DVR

Receives the aircraft's video feed.

Compatibility: The 5.8GHz analog receiver matches the Air65 video transmitter. Switch the display to 4:3 to match the C03 camera. The goggles include SteadyView diversity, antennas and a USB-C cable but require one 18650 cell. Format and test the microSD card in the goggles before relying on DVR recording. Update firmware only when required by Skyzone release notes or support guidance.

Required | Last checked 2026-07-21

View Selected Product

4. Flight batteries: Tattu 3.8V 1S 300mAh 75C LiHV Battery 5-Pack

Exact variant: BT2.0 connector

Powers the aircraft and matches its required voltage and connector.

Compatibility: The 1S 300mAh capacity and BT2.0 connector match the selected Air65. Select BT2.0, not PH2.0. Use a 4.35V LiHV charge target only when the battery label specifies LiHV.

Required | ASIN B097BV6K5L | Last checked 2026-07-21

Check Price on Amazon

5. Charger: VIFLY WhoopStor V3

Exact variant: Six-port 1S LiPo/LiHV storage charger with BT2.0 and PH2.0 ports

Charges and stores the selected flight batteries correctly.

Compatibility: Provides six independent channels with charge, discharge and storage-voltage functions. Its BT2.0 ports directly support the selected Tattu batteries. Configure the correct LiPo or LiHV termination voltage and never charge batteries unattended.

Required | ASIN B0C5CRFFBL | Last checked 2026-07-21

Check Price on Amazon

Required Before You Fly

6. Radio and goggle batteries: RadioMaster 18650 3200mAh 3.7V Battery 2-Pack

Exact variant: Quantity 2 packs, four cells total

Powers the selected controller and goggles.

Compatibility: Four cells provide two batteries for the Pocket radio, one for the Cobra X V4 goggles and one spare. Select the RadioMaster 3200mAh version. Pyrodrone lists these cells as compatible with the Pocket; battery orders must use ground shipping within the United States.

Required | Last checked 2026-07-21

View Selected Product

7. Charger power supply: Anker Nano 45W USB-C PD Charger

Exact variant: 45W compact charger with included six-foot USB-C cable

Supplies the charger with the required input power.

Compatibility: Supplies sufficient USB-C PD input for the WhoopStor V3. It can also charge the radio and goggles sequentially using the appropriate included device cables.

Required | ASIN B0DPKRC84P | Last checked 2026-07-21

Check Price on Amazon

Optional Upgrades: These Can Wait

8. DVR storage: SanDisk MAX Endurance 64GB microSDXC

Exact variant: SDSQQVR-064G-GN6IA, Class 10, U3 and V30

Provides recording storage for the selected video system.

Compatibility: Intended for repeated video recording and suitable for the Cobra X V4 DVR. Format the card in the goggles before recording. A card is not required to fly.

Recommended | ASIN B084CJ96GT | Last checked 2026-07-21

Check Price on Amazon

Final compatibility check before ordering

- The BETAFPV Air65 Freestyle receiver and RadioMaster Pocket must both use ELRS 2.4GHz.
- Select RadioMaster Pocket Charcoal, ELRS, FCC and Mode 2 for the U.S. package.
- The BETAFPV Air65 Freestyle requires 1S 300mAh BT2.0 batteries; do not substitute PH2.0 batteries.
- Use the Cobra X V4 in 4:3 mode to match the C03 camera.
- Configure the WhoopStor for the correct LiPo or LiHV termination voltage before charging.

After everything arrives

1. Install a simulator and practice angle changes, throttle control, and recovery before the first real flight.
2. Bind ELRS and verify Betaflight channel mapping, arming, flight modes and failsafe before flight.
3. Charge the radio, goggles and 1S packs, then fly short indoor sessions with spare props ready.

Operating note

This checklist is educational and package-specific. Follow manufacturer instructions, current FAA requirements, local rules, battery safety practices and site conditions before flight.